ETICA COMMUNITY REPORT

A protocol with a real use case

Etica protocol is a POW blockchain that aims to revolutionize how medical research is organized. It is an open-source protocol that rewards open and collaborative research,

No VCs
No Initial Coin Offering
No Executives
No leaders
No Premine

A community-driven project

Useful links to get started:

Main Website: https://www.eticaprotocol.org
Read the whitepaper: https://www.eticaprotocol.org/viewwhitepaper
Great guides to get started: https://www.eticaprotocol.org/eticadocs/
Get the Offical Wallet: https://github.com/etica/etica-gui
Egaz Faucet: http://faucet.etica-stats.org/
Understanding Tokenomics: https://www.eticanomics.net/
See the source code: https://github.com/etica
Blockchain Explorer: https://www.eticascan.org/
Telegram group: https://t.me/eticaprotocol
Bitcoin talk: https://bitcointalk.org/index.php?topic=5411039
Discord Group: https://discord.gg/b7kWYK2Y3Y
Reddit: https://www.reddit.com/r/Etica/

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The beginning

Etica blockchain consists of one token and one coin. ETI is the token of the protocol that rewards research. EGAZ is the coin - the equivalent of ETH on Ethereum network. EGAZ secures the blockchain and pays for txs fees. Both ETI and EGAZ can be mined.

It took a lot of time and decent knowledge to write an ETI contract from scratch, because something the the same blockchain industry has not seen.

ETI (Token)	
Mining algo	Sha3Solidity
Block time	10 Minutes
First block	April 17 2022
Miner	Sha3solidity miner

EGAZ (Coin)	
Mining algo	Etchash
Block time	15 seconds
Block Reward	2,... EGAZ
First block	April 17 2022
Miner	Etchash miner

*The white paper was published and sent to the original Satoshi Nakamoto mailing list in October 2019.
*Finally, In 2022 the project was launched after a few attempts the project was successfully launched.

Mining

ETI hashing alghoritm is Sha3Solidity

SoliditySha3 is a built-in function in the Solidity programming language used for hashing data. It is used to generate a 256-bit hash value of the input data using the Keccak-256 algorithm.

The function takes one or more arguments of different types, such as integers, strings, addresses, and arrays, and returns a bytes32 value. The input arguments are concatenated and hashed to produce the output hash value.

SoliditySha3 can be used in smart contracts for various purposes, such as generating unique identifiers, verifying data integrity, and securely storing sensitive information. It is commonly used in Ethereum-based decentralized applications (dApps) for cryptographic operations and secure data storage.

Currently, ETI is only one mining pool*: http://eticapool.com/
All ETI mining pools: https://miningpoolstats.stream/etica_eti
ETI miner: https://github.com/etica/SolidditySHA3MinerEticaOptimised

EGAZ hashing alghoritm is Etchash

Etchash is a memory-hard hashing algorithm that is used in EGAZ to secure the network and validate transactions. It was developed as an alternative to the Ethash algorithm used in Ethereum (ETH) to prevent the use of ASICs (Application-Specific Integrated Circuits) for mining. The Etchash algorithm uses the Keccak-256 hash function, similar to Ethash, but with additional memory requirements. It requires a large amount of memory to be accessed randomly during the computation, which makes it more difficult and expensive for ASICs to optimize their performance.

Egaz mining pools: https://miningpoolstats.stream/etica
https://github.com/etic/eticapool

Etchash miners:
BzMiner
SrbMiner
T-rex

*the ETI mining pool is open source like many of Etica's ecosystem of apps.

Launch

The Etica blockchain has been launched several times due to some technical problems. There was a solo miner who took over 50% of the network hash rate and all the blocks because of the following problem. And it worked fine!

The problem was due to the low initial complexity of ETI so the the difficult but the right decision was made to run a blockchain, but only after 2 days publish the ETI smart contract. **150 thousand ETI** were mined for these 2 days to the following wallets:

0x7767229c334D128cb956ef08E4580756b1753121 : 29 090.72951 ETI
0x224E307b688A815b8f03Db5de94AC7FC206CF35B : 17 222.17753 ETI
Oxd4763DA49A60E296Ed199C4Ab7D0d8a3a889eA5E : 104 100.94183 ETI

Kevin Wad has the keys to these wallets and these ETI belong to the community - for future listings and for the development of the protocol.

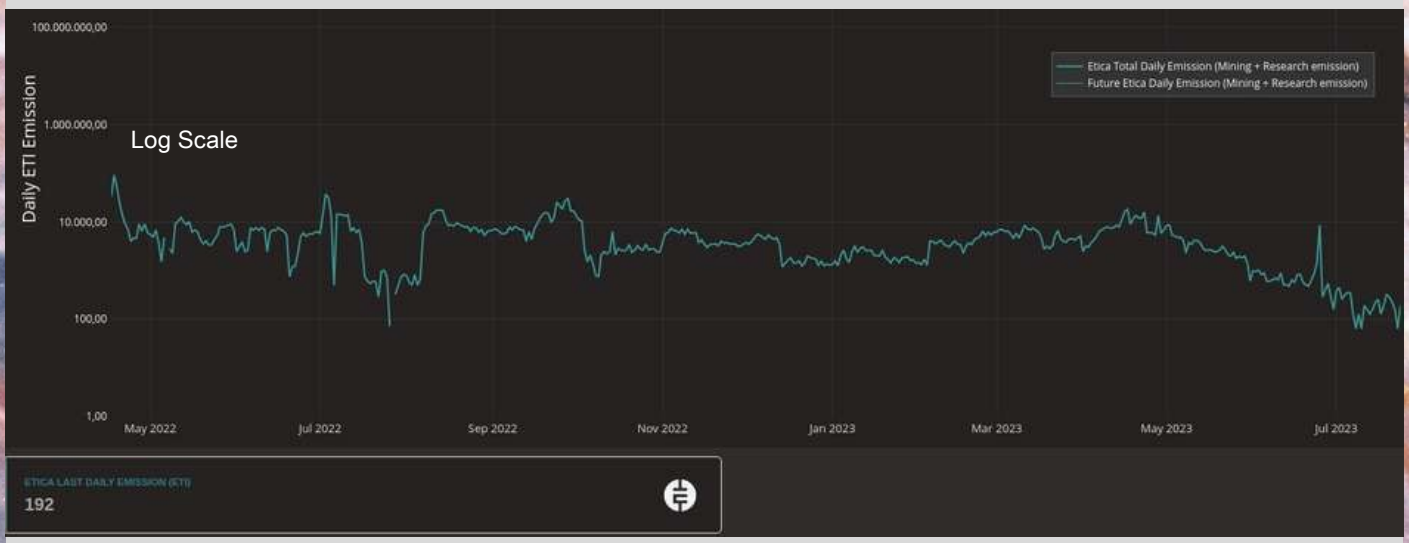
Egaz's start was without any issues, therefore, there was no launch delay and the decision to start mining only after 2 days was not required.

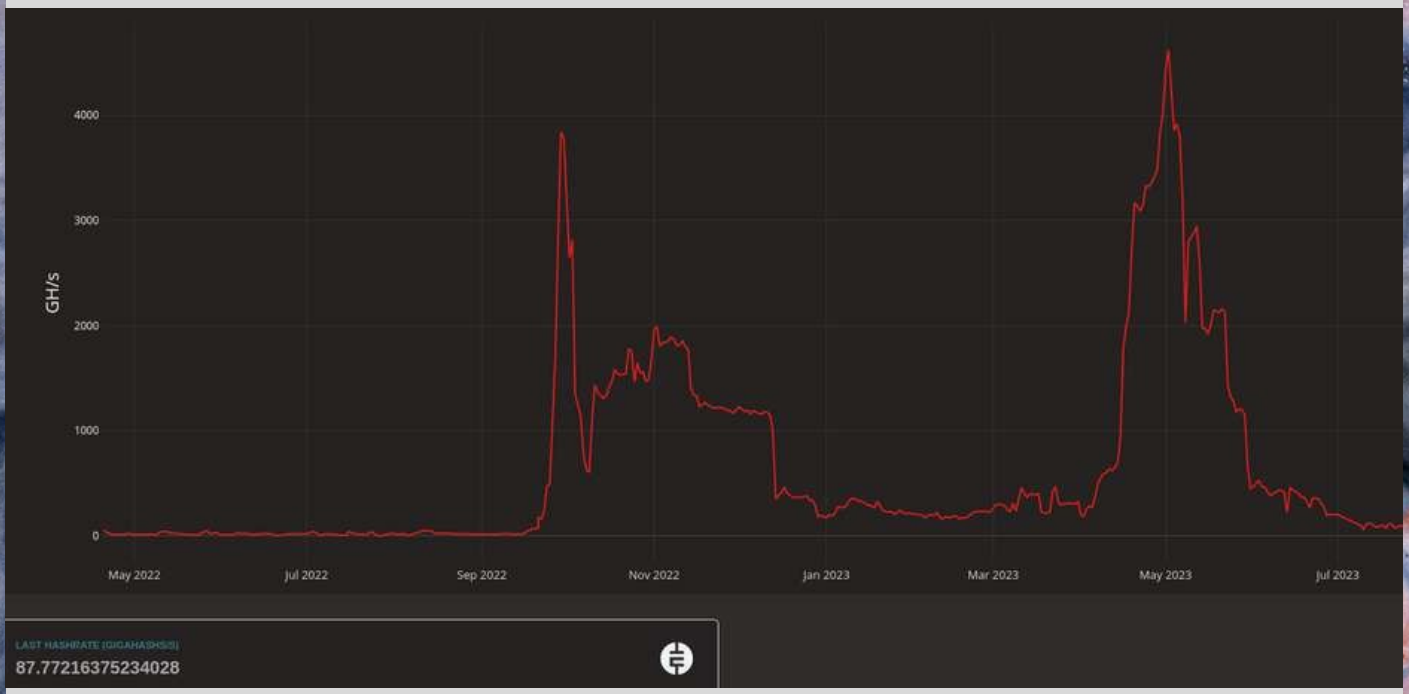
Understanding why Etica has its own chain

it is a fork of eth classic with just one token called ETI. And gas is paid with egaz which is equivalent of et. Since there will be one token, the blockchain never gets bloated and the fees dont get wasted. The choice of eth classic was that there are lots of project that have been built, ideas tested and they are all somewhat compatible with etica. Easier to create stuff pretty much, we can use the research and knowledge of eth community

ETI Emission

ETI has a 21 million initial supply and then a fixed inflation rate of about 1% per year to finance research*. Reaching 21m will take 9 years from now. The current ETI supply is **2,464,645**. ETI daily emission is based on the block reward. The current block reward is about 31 ETI. The block time is 10 minutes.





*This inflation rate can and will change based on community vote and decisions

About the protocol

Etica: A type 1 civilization neutral protocol for medical research abstract. A purely neutral protocol for rewarding medical research would allow greater efficiency and the sharing of early-stage medical discoveries without intellectual property.

Open-source research can make medical research more efficient and faster but its benefits are lost if intellectual property is still required to incentivize research.

The protocol is based on a privacy voting system in which token holders can submit proposals. The proposals are scientific articles oriented toward a specific disease.

The protocol institutes a Nash equilibrium for each disease to incentivize the publication of research that could lead to medical treatments. Proposers and voters are rewarded or penalized depending on the outcome of the proposals' votes.

For each proposal, the approval choice is considered the right choice if it gathered more votes than the protocol's threshold. This threshold is readjusted by the protocol every 5 weeks depending on the ratio of approved and rejected proposals. If the voters tend to approve too many proposals then the protocol's threshold is raised if, on the contrary, the voters tend to reject too many proposals then it is decreased.

Users have to vote upon proposals based on their inherent properties, they can't see other users' votes thanks to a two-step voting system with privacy.

The protocol impels off-chain communications between token holders about proposals' usefulness. Organizations based on a specific disease or group of diseases are likely to emerge in order to provide token holders with relevant information and analysis of proposals through forums and dedicated website explorers.

Etica aims to become the neutral protocol on top of which the next generation of decentralized communities will organize themselves and gain expertise to discover medical treatments without intellectual property.

Understanding the functioning of the protocol 1

The protocol uses IPFS technology, it's a decentralized file storage and sharing system that aims to improve the way we store and access information on the internet. Unlike traditional centralized systems where files are stored on a single server or data center, IPFS allows files to be stored and distributed across a network of computers. In IPFS, each file is given a unique hash that can be used to retrieve it from any node in the network that has a copy of the file. This means that files can be accessed quickly and efficiently, without relying on a single point of failure.

The protocol aims to promote oriented research. So we need to define a proposal as the combination of its content (represented by an IPFS hash) and the disease for which it is proposed to. As a consequence, each proposal is identified by the hash resulting from its {IPFS hash, disease hash} combination. Diseases uniqueness is handled by hashing the English name of the disease. It removes the risk of having multiple disease entities referencing the same disease which would recreate the work reproduction issue of the current system.

To implement a voting system, we will need to use a staking system similar to Travis Moore's brainpower system. Voting or submitting proposals require staking Eticas (ETI) in exchange for Bosoms in the first place. Staking ETI means locking them up for 28 days and getting Bosoms with a 1 to 1 ratio. Bosoms are then used to vote on proposals, submit proposals or create new diseases. When a token holder uses Bosoms he or she takes the risk of being slashed. The slash means the related stake duration will be increased in proportion to the slashing ratio of the proposal. In fact, each proposal will have a slashing ratio that takes into account the gap between the victorious side and the losing side. The more the victorious side has Bosoms over the losing side the higher the slashing ratio will be.

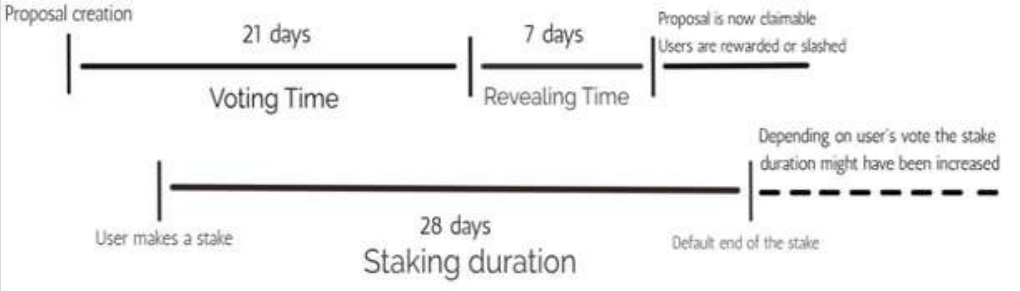
The protocol is based on periods of 7 days. Each proposal belongs to a period and each period has its curation reward and editor reward to reward contributors with ETI. For each period the protocol will issue a new ETI based on a yearly inflation rate of 2.6180339887498948482045868343656%*. Meaning that this collectively accepted yearly inflation of 2.6180339887498948482045868343656%will finance the reward system. After being submitted a proposal can be voted upon by the community for 21 days.

In order to prevent the user from voting based on the other users choice, the protocol should implement a voting system with privacy. But a completely private voting system would make the protocol obscur and we should not give up the possibility to analyse the proposals results. A twosteps privacy voting system guarantees both the privacy required for the voting period and the transparency required for the revealing period. When a proposal is created users have 21 days to commit their votes and then 7 days to reveal their votes. Commiting a vote means sharing a hash of the vote parameters prior to revealing it during the revealing period.

*This inflation rate can and will change based on community vote and decisions

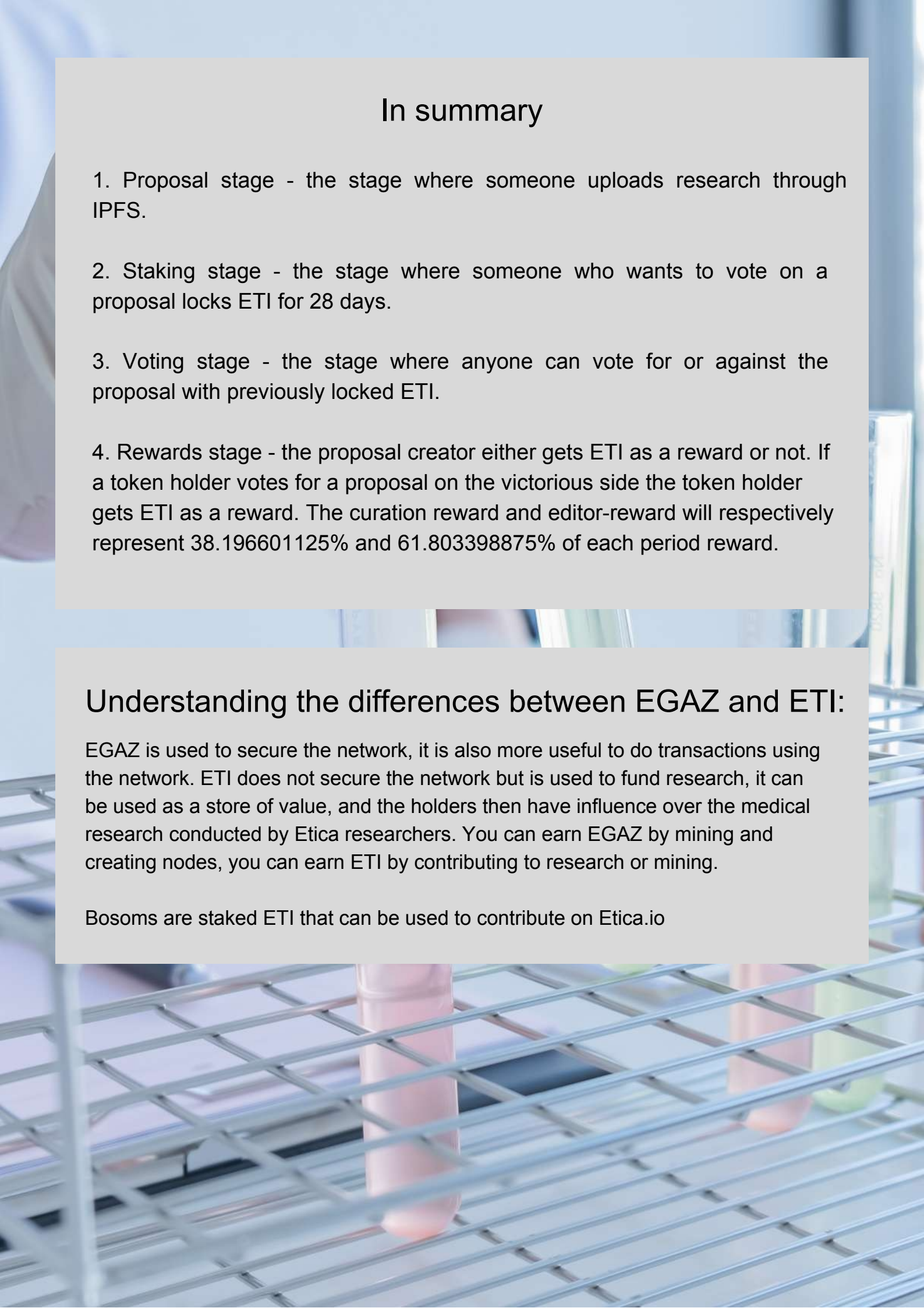
Understanding the functioning of the protocol 2

After 28 days have passed since its creation the proposal becomes claimable and users have to call a function to either be rewarded with ETI or be slashed. If a token holder votes for a proposal on the victorious side the token holder gets ETI as a reward. The amount of the reward will be a percentage of the period's curation reward based on the weight of his vote amount. Proposers of accepted proposals get a percentage of the period's editor-reward based on the weight of their proposal's approval votes amount. The curation reward and editor-reward will respectively represent



A real challenge is to avoid the "manipulability" of the voting system. Meaning we want voters to express their real opinion about proposals and not their best interest opinion. While the voting system should respect the majority criteria it is even more important that the system doesn't transform itself into a dictatorship of approvals where voters always vote yes for strategic reasons without taking time to analyze the proposals. On the other hand, score voting systems provide voters with more options to express their opinions but create manipulability issues[3]. Due to the manipulability of score voting systems we should prefer using a voting system that only offers 2 options: approve or disapprove. As it is, such a binary system is likely to evolve into a dictatorship of approvals as voters will tend to approve proposals by default since it would be the strategic choice because most proposals would be accepted. It creates a vicious circle in which default voters are rewarded at the expanse of honest voters that only vote based on the intrinsic properties of proposals. The honest voters would be forced to start to default vote as well making the protocol completely irrelevant.

Consequently the protocol should implement a ratio target that represents the expected ratio between accepted and rejected proposals. For instance, a 70% ratio target would mean that the protocol demands 70% of proposals to be accepted and 30% to be rejected. i) Readjustment of protocol's threshold [b]: If the actual ratio of accepted proposals over the last 5 periods is superior to the protocol's ratio target then the protocol's threshold variable is increased. On the other hand if the actual ratio of accepted proposals over the last 5 periods is inferior to the protocol's ratio target then the protocol's threshold variable is decreased. Plus notice that in order to respect the majority criteria, despite being dynamic the protocol's threshold can't be inferior to 45%. It will always be between 45% and 99%. Meaning proposals will never be integrated into the system as accepted if they didn't get at least 45% of vote approvals. Under 50% protocol's threshold should almost never happen and could only happen if the system turns into a dictatorship of the disapproval votes



In summary

1. Proposal stage - the stage where someone uploads research through IPFS.

2. Staking stage - the stage where someone who wants to vote on a proposal locks ETI for 28 days.

3. Voting stage - the stage where anyone can vote for or against the proposal with previously locked ETI.

4. Rewards stage - the proposal creator either gets ETI as a reward or not. If a token holder votes for a proposal on the victorious side the token holder gets ETI as a reward. The curation reward and editor-reward will respectively represent 38.196601125% and 61.803398875% of each period reward.

Understanding the differences between EGAZ and ETI:

EGAZ is used to secure the network, it is also more useful to do transactions using the network. ETI does not secure the network but is used to fund research, it can be used as a store of value, and the holders then have influence over the medical research conducted by Etica researchers. You can earn EGAZ by mining and creating nodes, you can earn ETI by contributing to research or mining.

Bosoms are staked ETI that can be used to contribute on Etica.io

Why Etica matter:

Medical Research has a money problem:

Medical research funding in many places around the world can come from public sources (tax money) as well as private organizations which distribute money for equipment, salaries, and other research expenses. This is one of the biggest challenges for medical scientists, is to find a sustainable source of many to run experiments and concentrate on the science.

In most places around the world, Governments or public organizations provide funding for research, which is good, as there are fewer chances of conflict of interests, but there is not enough. The USA offered 900 federal grant programs, and half of this funding, 800 billion USD goes to healthcare. In 2020, the National Institute of Health accepted only 21% of research grant proposals (11,000/55,000).

So researchers then look for private funding, which will support science if it supports their corporate agenda. This is catastrophic because it means that some science is guided not by what is good for society/humanity in terms of science, but by what will make the most return on investment to these private funders. Much of nutrition science is funded by the food industry, and this is a major conflict of interest, food companies will not change the results of research, but they will not fund something if the hypothesis goes against their interests, thus shaping how science evolves. This is the same for drugmakers that fund most drug clinical trials. This means that drugs for a disease that won't be profitable (In places with poor populations or very few people touched by the disease) might only get funding from charitable organizations (less than 3% of funding in the USA).

Since scientists have to compete for this finite and decreasing amount of funding (at least for public funding), it creates conflicts of interest between scientists of the same field, puts pressure to publish many papers instead of few quality ones, and it forces scientists to oversell their work (use buzzwords to get funding). This competition between scientists for funding affects what people study, the risk they take, and the risk they don't take, overall it pushes researchers to do predictable, safe and hyped science. This also means scientists have to spend a lot of time and energy competing for funding and writing grant proposals which means less time for science.

On top of that, grants are usually short-term (3-5 years), which means that scientists are less likely to apply for long-term projects, even though these are usually the ones that create the biggest discoveries. New, experimental, but potentially breakthrough research takes a long time to produce, requires the work of many people, and it does not always pay off. So scientists often avoid these types of studies that don't easily get funding and prefer short-turnaround, safe research.

Why Etica matter:

Science is pressured to display certain results

Medical researchers are judged by the research they publish, and they have tons of pressure to get certain types of results. If you get good splashy results, it will be easier to get published in a prestigious journal, but if they get mediocre results, many scientists consider presenting the data differently to keep it exciting.

“The consequences are staggering. An estimated $200 billion — or the equivalent of 85 percent of global spending on research — is routinely wasted on poorly designed and redundant studies, according to meta-researchers who have analyzed inefficiencies in research. We know that as much as 30 percent of the most influential original medical research papers later turn out to be wrong or exaggerated.”

Rewards for medical research should be based on the research methods, and quality of analysis, not just the outcomes of the research.

Going back to the funding problem, this problem is exacerbated by private funding methods that expect certain results that align with their agenda.

Not rigorous enough

There might be a “crisis of irreproducibility”, a survey made by nature.com about reproducibility (1576 researchers) concludes that “70% of researchers have tried and failed to reproduce another scientist's experiments, and more than half have failed to reproduce their own experiments.”

The data from the survey also reveal contradictory thinking about reproducibility: “52% of those surveyed agree that there is a significant 'crisis' of reproducibility, less than 31% think that failure to reproduce published results means that the result is probably wrong, and most say that they still trust the published literature.”

On top of that, studies that fail to replicate results from a “good” study might not get published. Studies need to be at the cutting edge of science, with new and positive results, this pressure prevents necessary replication and might produce many false positive results.

Some causes could be a lack of understanding of statistics, poor experimental design, lack of mentoring from senior researchers, fraud, hyper-competition, lack of resources, or simply selective reporting of results.

Why Etica matter:

Peer review needs to be improved:

Peer review is an essential aspect of research, scientists send their articles to a journal, and if the journal accepts the article, it is sent to peers in a similar field, for constructive criticism, to then be published or not in that journal. The journals set up a blind reading, reviewing, and editing of the articles to reduce bias. This system in theory works, but it has many shortcomings, it often does not detect fraud, selective results, and other problems. Researchers are often not paid to review articles, which creates less incentive to do serious peer reviews.

Science is behind paywalls

A lot of science and research is locked away and not easily accessible. They are often costly to access and can be hard to find. The publication process can also be slow, which slows down many other processes. Many Researchers have argued that academic research should be free for all to access, as many for-profit publishers slow down the pace of science. One article in a scientific journal can cost you 30$, some yearly subscriptions are 300$ and up to 10,000$. On top of that, it can be quite expensive to publish a scientific article: “the average cost to publish an article is around $3500 to $4000” and most of that cost is falling on the researchers themselves.

Science is slowed and locked by intellectual property

Protected patents are a relatively recent invention, it has since evolved into a complex set of laws and regulations, both at the local and international levels. And despite the fact that patents are intended to promote innovation and progress, their impact on the development and access to life-saving drugs has been a subject of increasing concern. The current patent system, which grants exclusive rights to pharmaceutical companies to produce and sell drugs has led to high medicine prices, limited the scope of research, and limited access to care for many people, especially those in developing countries

When patent rights are expensive, it makes successive activities more costly, and when patents are debated, this can slow down the progress of science and technology. Patents are also used as a business strategy, often used by large firms, that use patents to entrench their position in the market by making it expensive/complicated/impossible to research on certain subjects, many times not even using the patent. The current patent system does not reward follow-up research, as scientists are scared of litigation.

Is the right to intellectual property or Human rights more important to you? I believe that patents should not extend so far as to interfere with individuals' dignity and well-being. Where patent rights and human rights conflict, human rights must prevail.

How Etica attempts to solve these problems

Big money problem: Etica provides a new additional decentralized funding system for medical researchers to use. We are not naive, most people will act in their own interest. Good and evil people will come to Etica but what is different is that Etica is not under the control of the incumbent of the system that chooses the pace and direction of research according to their vested interest.

Poorly designed studies: It will be important for the community to select quality and not flashy research. In fact, the token holders have a collective interest that Etica maintains its value. If the network globally accepts useless proposals then the network is going to become worthless. A key part of the Etica system is that the token holders have a responsibility to get the best proposals rewarded so that people keep increasing the amount of work they do for each proposal and create a healthy open-source ecosystem.

Replicability problem: Etica's main aim is not to solve this problem, but open science contributes to more replicable science.

Peer review: Peer review is incentivized on the Etica platform and can be a way to earn more ETI, this means researchers can be paid to peer review. Voters that make the curation work are rewarded with 38.2% of the ETI research rewards. Token holders will not necessarily be scientific experts on everything, but we can imagine different ways people can get informed on proposals and share information. They can use earned ETI to finance expertise and do quality peer reviews.

Paywalls: All Etica proposals are public and free to read, as well as easy to access.

Intellectual property: Etica removes intellectual property which is costly to medical research and human rights.

Etica aims to be fully decentralized and community-driven: How to contribute to Etica and help it grow

Contribute to research: It is currently possible to earn around 8000 ETI per week by doing medical research on Etica. Contributing to open-source medical research is important because it promotes collaboration, innovation, and transparency in the scientific community, leading to improved health outcomes for individuals and society. Open-source medical research is often more cost-effective than traditional research methods, as it allows for the pooling of resources and expertise from around the world with barriers. This can lead to faster and more efficient research outcomes. If we want Etica to succeed we need to start funding research, we also need to start curating research. You can help by doing research, curating work, or onboarding researchers. Research on Etica will give it its value in the long term, so this might be one of the most important areas of development.

Closed research = slower research = wasted money = lost lives

Mining and creating nodes: The easiest way to contribute by mining is by joining a mining pool. A mining pool is a group of miners who combine their resources to mine a cryptocurrency together. This increases the chances of finding a block and receiving the block reward. You can also solo mine which is usually harder since you don't share computational resources. You can both mine ETI and EGAZ, both are important but has different impact and influence. Mining ETI makes it possible to contribute to research, and mining EGAZ helps to secure the network.

Running a node and mining are two different ways to contribute to a proof of work cryptocurrency. Running a node is essential for maintaining the integrity and security of the blockchain, while mining is important for generating new coins or tokens and processing transactions. Both nodes and miners play essential roles in a proof of work cryptocurrency and contribute to the overall health and security of the network.

Develop applications for Etica: If you have programming skills, you can contribute to the project by developing applications or tools that use its blockchain. This can include creating wallets, developing decentralized applications, or contributing to the development of the blockchain itself.

Etica aims to be fully decentralized and community-driven: How to contribute to Etica and help it grow

Participate in the community: Contribute by participating in the community. This can involve providing feedback, reporting bugs, suggesting improvements, and helping others new to the Etica ecosystem. It also means creating marketing content, guide, and tutorials, since Etica is decentralized this can be shared on official channels as well as personal channels or organizations.

Trading, buying, and holding: Trading and buying activity can help to increase the value and popularity of a cryptocurrency, which can lead to greater adoption and support for the network. It also helps to establish a market price for ETI and EGAZ. This price serves as a benchmark for investors and traders and helps to stabilize the value of the cryptocurrency. It also creates liquidity in the market, which makes it easier for investors, contributors, and researchers to buy and sell EGAZ and ETI. On top of that when more people buy and use ETI and EGAZ, it increases their adoption and popularity which means more investors and users will become interested in the technology.

More importantly, it is a great way to support the protocol: When investors buy and hold a cryptocurrency, they provide support for the network by increasing demand for the cryptocurrency. This can also encourage developers and miners to continue contributing to the network, as they see that there is interest and demand for the cryptocurrency.

However, it's important to note that buying and trading activity alone is not enough to ensure the success of a cryptocurrency - the underlying technology and community also play a crucial role. And this is why I have put it at the end of this guide.

Exchanges:
Here's a list of exchanges where you can buy EGAZ and ETI, **Always remember - not your keys, not your coins**

https://xeggex.com/market/ETI_USDT
https://xeggex.com/market/EGAZ_USDT

https://safe.trade/trading/egazusdt
https://safe.trade/trading/etiusdt

https://www.xredx.org/trading/egazusdt

Secured OTC trade in Discord: https://caldera.trade/
Caldera Youtube tutorial : https://www.youtube.com/watch?v=c-7KL66Gx-s

Etica and others

Thousands of seemingly worthless coins have been created by venture capitalists with the intention of misleading others. These tokens, often labeled as 'Layer-1,' 'Layer-2,' 'CEX,' 'DEX,' and 'dApps,' share a common objective: siphoning wealth from unsuspecting investors to enrich venture capital firms. However, it's important to recognize that the vast majority of these coins are destined to plummet into obscurity.

Among the countless cryptocurrency projects spanning from the top 1 to the top 20,000+, only a select few truly exhibit innovative ideas. Bitcoin and Monero stand out in this regard. Bitcoin was conceived to facilitate transactions through blockchain technology, while Monero, resembling Bitcoin in many ways, adds an essential layer of privacy by default, safeguarding sensitive information. This progression aligns with the principles outlined in the Bitcoin whitepaper.

The truth is that blockchain technology, decentralized ledgers, and smart contracts should not be solely centered around financial gain.

Etica protocol

The primary objective of the Etica protocol is to integrate blockchain technology into the realm of scientific research. Decentralized medical science, in particular, holds immense significance as it fosters a more inclusive and democratic approach to research funding and execution.

In contrast to the traditional model of medical research funding, which often involves a limited group of stakeholders exerting control over research and its outcomes, the Etica protocol seeks to address the inefficiencies, sluggishness, and potential corruption inherent in this approach.

ETICA

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Community donation addresses:
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XMR:
481ok2WQNNeDSQRb2ymwNGZN1XRBkntUQTDbwbw9Fqr2H3G7fj5hpWDBZKYcEkP
d7WAQ3x9MhAFNK6oQgBCUnNcNU3NwJry