IMAGE: KOUZOU SAKAI

GENE EDITING

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ETHICS OF GENE EDITING: A PRIMER

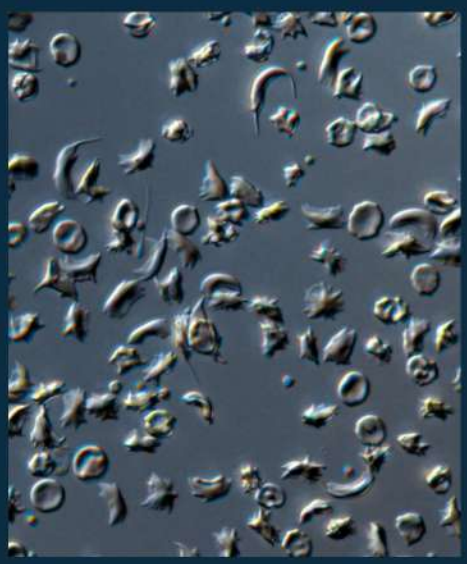
ANNABELLE LEI

Are We Editing the Future or Rewriting Ourselves?

Imagine a world where genetic diseases like sickle cell anemia are eradicated, crops withstand the harshest climates, and humans possess enhanced abilities. This is not the plot of a science fiction novel, but the burgeoning reality brought by CRISPR and gene editing technologies. While the promise is immense, it makes us confront profound ethical dilemmas: Just because we can, should we?

The Promise of Gene Editing: A Cure for All or Just a Select Few?

Gene editing, particularly through CRISPR-Cas9, has revolutionized medicine and agriculture. Scientists are now able to precisely alter DNA sequences, offering hope for individuals suffering from genetic disorders. For example, CRISPR-based treatments are being developed to address conditions like sickle cell anemia and beta-thalassemia (National Human Genome Research Institute, 2025), both diseases that are life-threatening. The ability to remove or repair faulty genes opens possibilities for curing previously untreatable diseases, benefiting the medical realm immensely.



RED BLOOD CELLS WITH SICKLE CELL DISEASE.

Beyond medicine, gene editing is transforming agriculture. Genetically modified crops can be designed to be more resistant to pests, diseases, and climate change, enhancing global food security (National Human Genome Research Institute, 2025). Such innovations promise to reduce world hunger and stabilize food supply chains, but they also raise concerns about environmental impacts and biodiversity.

The concept of gene editing for human enhancement truly sparks debate. While some researchers explore possibilities like extending human lifespan or improving intelligence, these applications remain speculative (Almeida & Ranisch, 2022). If genetic modifications extend beyond medical necessity, society may face new divisions between those who can afford enhancements and those who cannot. If only the wealthy can afford genetic modifications, disparities in health and abilities could widen, reinforcing existing social hierarchies (Almeida & Ranisch, 2022).

Are We Playing God or Playing Doctor?

By drawing a line in the sand between gene therapy and genetic enhancement, there are some prominent differences. Gene therapy seeks to correct harmful mutations and prevent disease, whereas enhancement involves modifying genetic traits for non-medical advantages (Gabel & Moreno, 2019). The latter raises ethical concerns about creating "designer babies" with selected traits, challenging concepts of natural diversity and individuality that humans possess naturally.

Despite its precision, gene editing carries risks. Off-target effects, where unintended genetic changes occur, could lead to unforeseen mutations and long-term consequences (Ayanoglu et al., 2020). Even small errors in genetic modifications could have profound health implications, making rigorous regulation and ethical considerations imperative to the process.

The Global Debate: Laws, Culture, and Controversy

Different nations have approached gene editing with varying degrees of regulation. In 2018, a Chinese scientist caused global outrage by creating genetically edited babies, violating international ethical standards (Kohn et al., 2016). This incident definitely underscored the need for consistent global policies to prevent unethical experimentation.

Furthermore, religious and cultural perspectives also shape the debate. Some view gene editing as a means to alleviate suffering, aligning with humanitarian principles, while others warn against "playing God," arguing that genetic alterations disrupt natural processes and moral boundaries (Gabel & Moreno, 2019).

The responsibility of regulating gene editing falls on scientists, policymakers, and global health organizations. The need to establish ethical frameworks that promote responsible research while preventing misuse is purely essential to ensuring the technology benefits humanity as a whole (Kohn et al., 2016).

The Fine Line Between Progress and Pandora's Box

Gene editing holds the potential to transform medicine, agriculture, and even human evolution. Yet, its promises come with risks that demand careful ethical and regulatory consideration. As this technology progresses, the question remains: Will gene editing lead to a healthier, more equitable world, or will it deepen societal divides? As we advance toward a future shaped by genetic technology, our choices today will determine whether we are editing the future for the better or rewriting ourselves in ways we cannot undo.

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MY DAD, THE BIOETHICIST

CAITLIN LIAO

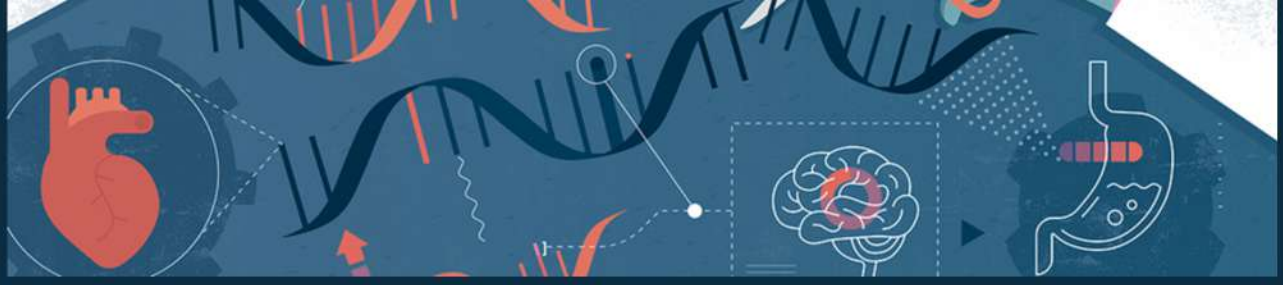
For as long as I can remember, I have associated family dinner with spirited debates over trolley problems and questions of consciousness. Am I a zombie if I don't experience consciousness? What *is* consciousness? Do I have rights as a child? To privacy? To love? Would you choose the track with one person, or let the trolley hit five?

My dad brought these questions to the table to encourage me and my brother to think and develop philosophical standpoints of our own. At some point, the nature of these questions shifted, growing centered around the field of bioethics — a study of the ethical implications of medical advancement and practice. Discussions went from zombies and brainteasers to whether it was okay to customize the genetic makeup of your child.

During these discussions, my dad — a bioethics professor at NYU — would say little but the prompt, occasionally interjecting to contribute an alternate point of view. Like he did with his college students, he wanted us to lead the conversation and formulate our own thoughts. However, in light of recent medical and technological advancements, I have watched our dinner debates appear in worldwide conversations over artificial intelligence and gene editing. So, I decided it was time to ask my dad what *he* thinks about all this.

Me: **Can you give us a brief explanation of what gene editing is?**

My Dad: Well, genes are the codes that determine who we are, how we think, how we look. Genetic engineering — gene editing — is the overall term for the selection and modification of genes. It has been going on for a long time, since people crossbred animals and plants to create more ideal species. More recently, we have developed technologies that allow us to go in and modify the genes as they are.



My Dad: (Cont.) There are two different targets of genetic engineering: the germline level — the gametes (eggs and sperm) — and the somatic level, which are the genes in any non-gamete cell. Engineering at the germline level can result in genes being passed on to the future offspring, while changes at the somatic level don't get passed onto future generations.

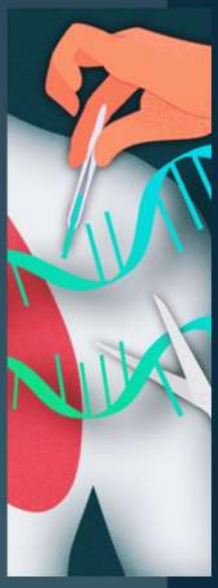
Most countries have banned germline genetic engineering due to the concern over passing on genetically modified traits onto future generations.

Me: Tell us about some techniques used in genetic engineering.

My Dad: Recently, we have developed a new technology called CRISPR gene editing. It's basically like cut-and-paste on a word processor— you can search for certain patterns of DNA, cut them out of the gene, and then replace them with other segments. That allows us to modify genes at both the germline and somatic level.

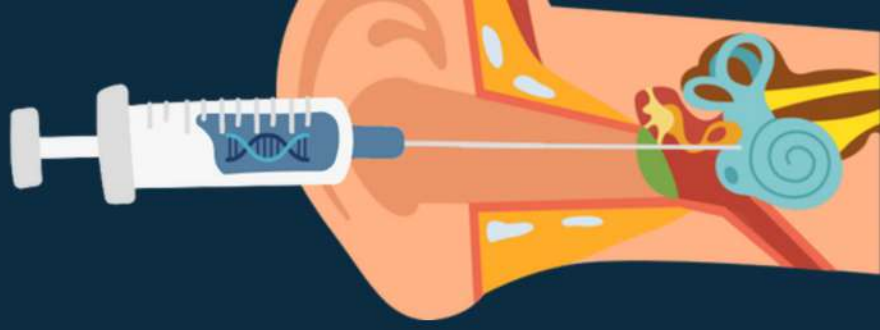
There's also something called in vitro gametogenesis (IVG). It allows a person to use their cells to create artificial gametes based on their own DNA. One of the controversies of IVG is the possibility of fertilizing an egg and sperm from the same individual, creating an offspring from the genes of one person.

Me: Do you have a specific stance on genetic engineering?



My Dad: Some ethicists argue that people and parents should be able to create whatever offspring they want. Others think it's unnatural, playing God, and that we should leave it to nature.

My view is somewhat in the middle. Being a human is about what we can do with our lives — whether we can do certain things — and in order to do certain things, we need to have certain "fundamental capacities." If there are genetic defects that are going to affect our fundamental capacities, then I think it would be permissible to modify these genes. For example, cystic fibrosis is a genetic disorder that causes brain damage and rapid deterioration. I think it would be permissible to use genetic engineering to correct this defect, given that a functional brain is necessary to exercise our fundamental capacities.



At the same time, there are things that don't affect our fundamental capacities. I think there is less of an imperative to say "we need to go in and change our genes" for something like eye or hair color. I also think there are some things that are impermissible. For example, imagine there is a healthy child with deaf parents, but the deaf parents want the child to also be deaf. I think it would be impermissible to go in and modify the gene so that the child can no longer hear, given that hearing is a fundamental capacity.

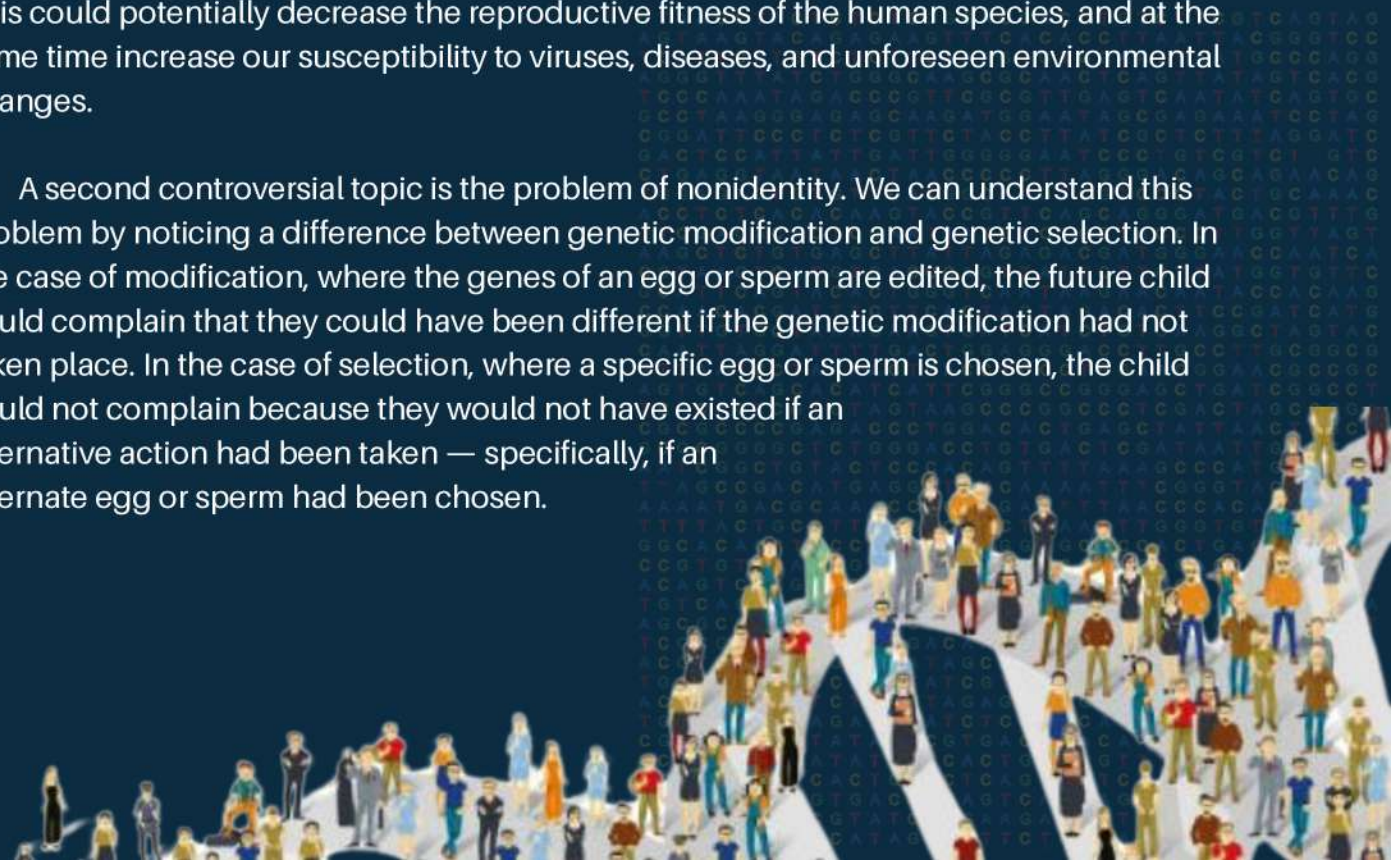
Me: **What are the positive implications of genetic engineering, versus the negative?**

My Dad: One positive aspect of gene editing is the possibility of fixing the genetic disorders that exist in the world, which could help parents have healthy babies. Another is the potential to assure the survival of the human species: The sun is going to die out and we need to get off the planet eventually. However, space is an unfriendly environment to our current biology. Genetic engineering could allow us to be more radiation or heat resistant, for example.

On the other hand, there are also many controversies. Here are three:

One controversial issue with germline editing is that modified genes could get passed onto future offspring and over time, eventually spread into large areas of the population. This could potentially decrease the reproductive fitness of the human species, and at the same time increase our susceptibility to viruses, diseases, and unforeseen environmental changes.

A second controversial topic is the problem of nonidentity. We can understand this problem by noticing a difference between genetic modification and genetic selection. In the case of modification, where the genes of an egg or sperm are edited, the future child could complain that they could have been different if the genetic modification had not taken place. In the case of selection, where a specific egg or sperm is chosen, the child could not complain because they would not have existed if an alternative action had been taken — specifically, if an alternate egg or sperm had been chosen.



My Dad: (Cont.) A third, and significant, issue surrounding genetic engineering is the potential to increase inequality. Once gene editing becomes more readily available, the rich may have greater access to it than the poor. This could result in the wealthy modifying or selecting offspring with physical and mental advantages, creating a literal gap in capability between the rich and the poor.

Me: **What is your favorite gene editing movie?**

My Dad: Gattaca — it exemplifies the problem of assessing human beings and their worth based on their genetic makeup.

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GENE EDITING: Scientific and Ethical Frontiers

RUHI YUE & JAYDEN BUDIMAN

Gene editing is one of the most revolutionary 21st-century scientific advances to date, boasting limitless potential in treating genetic diseases and improving the human condition. The application of such techniques as CRISPR-Cas9 allows researchers to design DNA to such a point that previously inconceivable approaches become available. That being noted, while to the extent potential for good abounds, concerns regarding ethics, as well as safety, provide ongoing fuel for controversy.

The Science Behind Gene Editing

Gene editing is the process of changing an organism's DNA to mend mutations or enhance certain traits. The CRISPR-Cas9 system, a by-product of bacterial immunity systems, is molecular scissors with the ability to cut DNA at specific locations (World Health Organization, 2023). Scientists can then add, remove, or replace genetic material to fix genetic defects.

The medical implications are profound. Researchers are exploring gene editing as a potential treatment for sickle cell anemia, cystic fibrosis, and even some cancers. Tests are already in the pipeline to see if CRISPR can be used to treat inherited blood diseases. Gene editing can even prevent genetic disease in embryos, reducing the prevalence of inherited disease in future generations.

Ethical and Safety Concerns

Gene editing, as exciting as it is, does pose significant ethical concerns. The fundamental concern is between therapeutic and enhancement use. Edifying genes for healing disease is widely accepted, but editing DNA for non-medical enhancements—such as intelligence or body type—gets into undesirable territory.

Still another ethical issue is the potential for unforeseen genetic impact. Off-target effects, in which unintended regions of DNA are altered, pose threats of new disease or introduction of mutations. Scientists are working on better gene editing tools to increase precision and reduce such threats (Bergman, 2019).

The case of He Jiankui, the Chinese researcher who in 2018 had edited the genome of twin embryos, illustrated the danger of premature experimentation (Normile, 2019). His experiment was universally criticized for flouting ethical standards because nobody yet understands the long-term consequences of these interventions. The episode has only contributed to calls for tighter global regulation and oversight of gene editing.

IMAGE: JUN CEN

Regulatory and Societal Implications

Governments and global organizations are actively debating how to regulate human gene editing. Some nations, such as the United States and the United Kingdom, permit restricted research on human embryos for therapeutic purposes but do not allow genetic alterations meant for birth. Others, such as China, have placed stricter controls after the He Jiankui experiment controversy.

The social impact of gene editing is also a significant concern. If gene engineering is an available commercial choice, then it will potentially exacerbate social disparities. The rich will be in a position to pay for genetic improvements, and society will consist of individuals with non-equal genetic distinctions (Hunt, 2023).

The Future of Human Gene Editing

With advancing science, gene editing holds amazing power to revolutionize medicine and drive human health forward. But with any technology, wise ethics and regulation should always accompany such innovation to achieve responsible use to its fullest potential. Walking a middle ground between innovation and moral responsibility will be critical as the globe ventures onto this revolutionary horizon (National Academies of Sciences, Engineering, and Medicine, National Academy of Medicine, & National Academy of Sciences, 2017).

Gene editing presents both extraordinary opportunities and profound challenges. If guided by rigorous oversight and ethical principles, it could revolutionize medicine and benefit future generations in unprecedented ways.

"What about plants?": A Case Study

Gene editing is transforming agriculture, promising breakthroughs that could address challenges like climate change, food insecurity, and population growth. While genetic modification is not new, recent advancements—particularly with CRISPR—have paved the way for more precise and efficient crop improvements. One promising area is the development of disease-resistant crops, which can significantly reduce crop loss and lower dependence on chemical treatments. In this feature, we explore one of the most impactful case studies: the creation of disease-resistant wheat.

Resistant Crops: A Game Changer in Agriculture

Crop diseases such as blights, rusts, and fungal infections threaten global food security, costing billions in agricultural losses annually. Traditional breeding techniques to develop disease-resistant varieties can take decades, but gene editing offers a quicker, more targeted solution. In 2020, wheat took a major step forward in agricultural innovation with the commercial growth of the HB4 wheat variety in Argentina. Developed by Bioceres Crop Solutions, this variety features a drought-resistant gene derived from sunflowers, offering a potential solution to the challenges posed by climate change. Despite the success of genetic modifications in other crops, wheat has historically lagged due to consumer reluctance and resulting trade barriers.

The adoption of the HB4 event, however, marks a pivotal moment, signaling a gradual shift in the acceptance of genome-edited wheat. The approval of HB4 in countries like Australia, Brazil, Colombia, New Zealand, Nigeria, and the United States for food and feed usage indicates a promising future for genetically engineered wheat varieties (Rafiei et al., 2024). As the global population continues to rise, advancing wheat through transgenic, cisgenic, and genome editing technologies could be crucial for ensuring food security.

Despite the progress, ethical questions persist. Critics worry about the ecological consequences of altering plant genetics and the long-term impacts on biodiversity. There are also concerns about transparency, labeling, and consumer choice. However, proponents argue that gene editing's precision makes it safer than older genetic modification methods and that the potential benefits outweigh the risks (Idris et al., 2023).

What's Next for Gene-Edited Crops?

For disease-resistant crops to gain wider acceptance, ongoing trials and transparent communication with the public will be essential. Governments and institutions must work together to develop clear regulatory frameworks that address both safety and public trust. As gene editing technology continues to advance, its role in sustainable agriculture looks increasingly promising.

The potential of gene-edited, disease-resistant crops cannot be overlooked. As researchers continue to innovate, the key lies in balancing scientific progress with ethical considerations. If successfully implemented, these crops could become a cornerstone of sustainable farming, ensuring food security in an ever-changing world.

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THE TRUTH ABOUT GMOS:
Separating Fact from Fear-Mongering

MAXWELL WANG

Genetic engineering has been a contentious subject of debate in fields such as health and nutrition for decades. Genetically modified organisms, commonly known as GMOs, have been developed through various gene editing techniques and have been around for longer than most think. GMOs offer solutions to many problems around the globe, but while some praise their increased nutritional value and potential to solve world hunger, many fear possible repercussions from manipulating nature's genetic code.

The concern regarding genetically modified food products has limited the amount of people that are willing to produce the foods. Furthermore, the apprehension surrounding them can make people hesitant and less inclined to incorporate them into their diets. Promoting understanding of how gene editing works in foods is an imperative: by bridging the gap between fact and fiction, we can make informed decisions about the inclusion of GMOs in our food supply.

The Genetic Engineering Process

There are various techniques used to modify food. The oldest methods include hybridization, which involves cross-breeding plants to create new varieties rather than modifying genes directly. This form of genetic engineering could combine traits of multiple organisms, but can't control the specific traits that are inherited.

Mutagenesis, which uses chemicals or radiation to induce mutations in plants, has the biggest drawback of any genetic engineering process, as it induces random changes in an organism's DNA. This means that the resulting mutations can be unpredictable and may not always have the desired effect. In fact, many mutations can be harmful or even lethal to the organism. Mutagenesis is a risky process, but this unreliable way of genetic engineering has long been replaced by safer methods with no drawbacks.

With the advancements in genetic engineering technology, more precise and efficient methods have emerged. These techniques allow for targeted and specific modifications to be made to an organism's genome, without the risk of harmful or unintended mutations.

Biotechnology, one such modern method of genetically modifying foods, involves inserting specific genes into an organism's DNA to give it a desired trait. For example, a gene from a bacteria that produces a natural insecticide can be given to a crop to make it resistant to pests (Peairs, n.d.). These modifications can help improve the quality, yield, and sustainability of our food supply.

A Notable GMO: Golden Rice

Golden rice is a genetically modified crop that has been engineered to contain beta-carotene, a precursor to vitamin A (Golden Rice Humanitarian Board, 2010). This innovation was developed to address vitamin A deficiency, which is a major public health issue in countries where rice is a staple food, such as China and India. In 1999, a group of scientists were able to express beta-carotene in rice, and their findings were then published in the following year (Baranski, 2013).

Genes from corn allow for the introduction of beta carotene into golden rice rice and those from the Panoea ananatis bacteria assist in the production of the precursor to beta carotene, while genes in E. Coli are added for the other traits to be more effectively integrated into the rice (International Rice Research Institute, 2019). The newly introduced genes, tested at more than thousands of times the expected concentration whilst consuming golden rice, are demonstrated to not be toxic or produce any allergic reactions in humans (International Rice Research Institute, 2019).

WILD TYPE | GOLDEN RICE 1 | GOLDEN RICE 2

The Impact of Public Perception

Despite numerous studies confirming the safety of genetically modified organisms, apprehensions persist, primarily because the majority of consumers have limited knowledge about the genetic engineering process. This leads to doubt and misinformation surrounding these foods. For example, upon learning that genes from E. Coli were used to create golden rice, many people fear possibly contracting the deadly pathogen from consuming the grain. However, the specific protein from E.Coli implanted in golden rice, phosphomannose Isomerase (PMI), contains no pathogenic properties. This protein is naturally found in the intestinal flora of humans, which means that food products containing it, including golden rice, are safe to eat (Hu et al., 2016).

It is crucial to prioritize the truth and evidence over baseless fears and misinformation, especially when it comes to topics as significant as combating world hunger and malnutrition. By utilizing food products genetically engineered to be nutritious and sustainable, we can make significant strides towards improving global health and food security. Only by understanding the benefits of GMOs and having open and informed discussions about their role in our food system can we work towards a healthier future for all.

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AN EXTINCT ANIMALS EXPLICATION

FIONA WANG

IMAGE: ELIA BARBIERI

Animals began roaming the Earth long before humans. In fact, one animal, the *namacalathus hermanastes*, was discovered to have been on the Earth nine million years ago (National Geographic Admin, 2018)! To put this into perspective, America was only founded around 250 years ago in 1776. However, over time, many animals have died due to natural or unnatural causes. For example, the dodo bird went extinct because they were too friendly and eventually got hunted until there were none left (Encyclopædia Britannica, Inc., 2024). This is where the debate of bringing animals "back to life" begins.

CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) is a term referring to an immune system that has been discovered to give scientists the power to gene edit (Synthego, 2024). CRISPR is powerful to the point of bringing back extinct animals, but the question is whether it should. Many animals exist that humanity knows little to nothing about. One of the most prominent examples of this is the dinosaur. Scientists are only able to paint a picture of what they think a dinosaur looked like based off of the skeletons they have, which are unable to paint a full picture.

Now consider the skeleton of a cat—looking at one without prior medical knowledge would not enable most people to identify it as belonging to a cat. CRISPR would allow researchers to explore unknown questions that have existed for centuries. But therein lies the question: should technology be used to bring back extinct animals?

DIRE WOLF PUPS

Reintroducing old species could destroy existing ecosystems, or the animals could become extinct once again if they don't have the same habitat as they previously did. Scientists don't know if animals will react a certain way after being brought back or how to go about letting them back into the wild. If animals are brought back with CRISPR, it would be inhumane to keep them locked up for scientific purposes, even if it contributed to scientific knowledge. Humans bringing animals back from extinction would co-opt funding that could be used for other important purposes, such as funding zoos or animal sanctuaries.

IMAGE: MATTHEW GRIFFIN

The truth of the matter is that nobody knows what consequences might occur. This is the main issue with bringing back extinct animals: *everything* is hypothetical. There will always be a question of how technology should be used and, with that, how it could be used to improve society. While positives of gene-editing do exist, it's impossible to ignore how detrimental the negatives could be if it is used, whether correctly or incorrectly.

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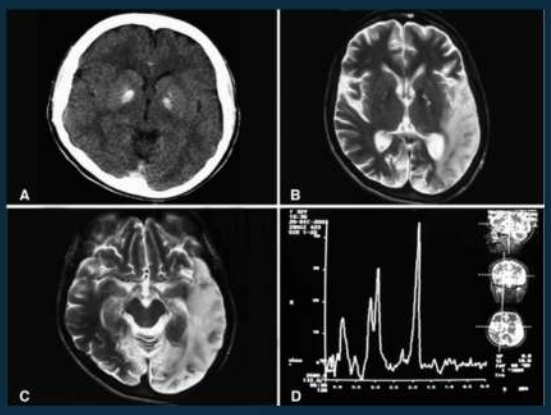
AIR ON THE GROUND

MIKA ZHENG

Air is an anime adaptation of a game produced by Japan's Key company, primarily revolving around a millennium-spanning legend of the winged people. In the anime, the winged people are a cursed group—those who live among humans suffer from severe illnesses as they gradually regain their memories of their true nature. The protagonist, Kamio Misuzu, is one such individual. Whenever she forms a close bond with someone, she falls ill, experiencing excruciating pain throughout her body, memory loss, and ultimately, death. Ironically, the only way to break the curse is to establish close relationships.

Behind this seemingly fantastical premise lies a surprising amount of scientific relevance, particularly in connection to genetic diseases. The real-world counterpart to Kamio Misuzu's condition is mitochondrial encephalopathy with lactic acidosis and stroke-like episodes (MELAS). MELAS is a disorder caused by structural and functional abnormalities in mitochondria, leading to insufficient ATP production in muscle fibers and brain neurons, resulting in muscular and neurological degeneration (Pia & Lui, 2024)

Although Air does not explicitly reference MELAS, the details align remarkably well. First, all the winged people depicted in the story are female. Mitochondria contain their own independent DNA, and, during fertilization, the mitochondria in the zygote originate exclusively from the mother. This means MELAS is inherited maternally and can establish a continuous lineage among females.



MELAS DISORDER IN BRAIN SCANS

A closer analysis of Misuzu's symptoms further supports this connection. Her fatigue and physical weakness temporarily improve with rest, and her inability to walk stems from her muscles not producing enough energy to support movement. MELAS impairs mitochondrial function, which is essential for energy production and aerobic respiration. This explains her excruciating pain—her dysfunctional mitochondria force her body to rely on anaerobic respiration, leading to the accumulation of excessive lactic acid.

Anyone who has gone a long time without exercising and then suddenly runs would be familiar with the pain caused by lactic acid buildup. However, in healthy individuals, even after completing a marathon, blood lactate levels typically peak at around 4 mmol/L. In contrast, MELAS patients in the later stages can experience lactate concentrations exceeding 15 mmol/L (Fryer et al., 2016).

The anime's portrayal of Misuzu's inability to form close relationships also aligns with this medical explanation. Social interactions trigger emotional excitement, increasing oxygen demand. However, her mitochondria cannot supply sufficient energy, prompting anaerobic respiration, lactic acid buildup, and severe pain. Pain leads to crying, which further exacerbates the condition, creating a vicious cycle that ultimately causes her to collapse. As a result, throughout her life, she has never had any friends. Her memory loss—where memories abruptly disappear and then resurface—also corresponds to a major symptom of temporal lobe epilepsy, a condition closely associated with MELAS. Interestingly, epilepsy is one of MELAS's common complications. All of this stems from a single point mutation: an adenine at position 3243 in the mitochondrial DNA mutating into guanine.

The curse of the winged people is a reflection of the inescapable tragedy faced by MELAS patients in reality. With no effective treatments available, their fate seems to lead only to an inevitable end—death. Air evokes an overwhelming sense of omniscient yet helpless despair in its audience. With conditions like these, humanity has never had a choice but to cope. Could the significance of gene editing offer even a glimmer of hope to these desperate individuals? Despite ethical concerns, we now theoretically understand how CRISPR-Cas9 technology can achieve precise gene insertion, deletion, or replacement. Disease is the vestigial wing that prevents one from flying in the sky of fate. Perhaps, gene editing could give us the opportunity to change that.

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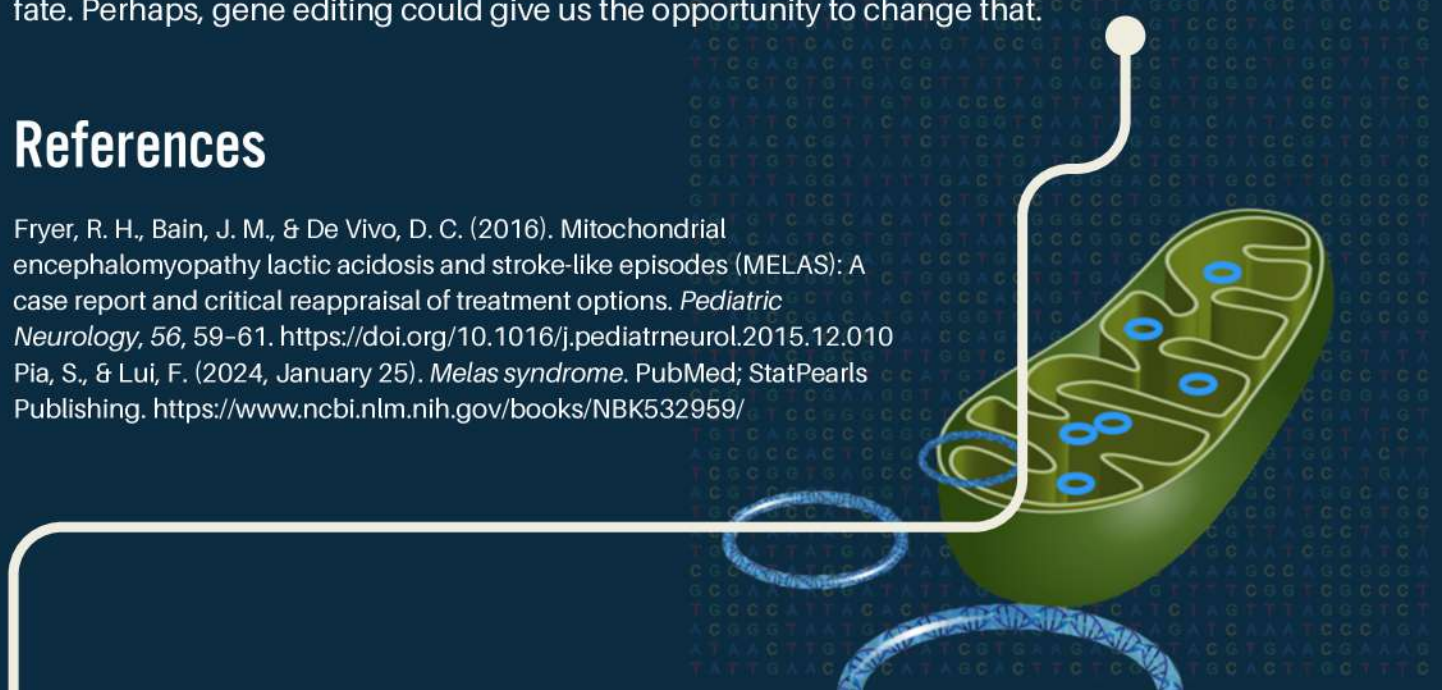

CLASSIFIEDS:

Exempli Gratia

Information: Exempli Gratia is a nonprofit based in Vancouver dedicated to making legal education more accessible to students. Through expert panels, interviews, and networking events, members can connect with real lawyers and law students to gain insight into their future careers. Mock trial practice opportunities are also available to help develop advocacy and public speaking skills, with the goal of organizing legal competitions in the future. Additionally, Exempli Gratia's magazine provides a platform for students to publish legal articles and engage with expert opinions alongside weekly posts, research pieces, and discussion forums. Anyone with an interest in law is welcome–no prior knowledge or experience is required.
Deadline: None
Contact info: Google Form

Quest for Clarity

Information: Quest for Clarity is an international nonprofit organization aiming to provide free, high-quality, science-based mental health resources and to fight the stigma against mental health support. Materials include articles, reels and videos, visual posts, podcasts, events, and a resource hub.
Deadline: None
Contact info: Reply to askq4c@gmail.com with your resume

HarmoniEats Initiative

Information: HarmoniEats Initiative is a nonprofit organization dedicated to educating and empowering individuals with food allergies and autoimmune diseases, such as Celiac Disease, by providing accessible, allergy-friendly resources and fostering a supportive community.
Deadline: None
Contact info: Reply to harmonieatsinitiative@gmail.com with your resume.

Half the Sky

Information: Half the Sky is a NPO whose mission is to drive the sustainable fashion movement as well as support the human rights of garment workers. By championing ethical practices and fair treatment, we aim to transform the industry and create a more just and responsible world for all.
Deadline: None
Contact info: Reply to Olivia Wei at marketinghalfthesky@gmail.com with your resume

Narratives of New Canadian Youth

Information: Created in 2024, Narratives of New Canadian Youth is a Toronto-based photojournalism project aimed at highlighting social, political, and economic issues faced by student immigrants to dismantle negative stereotypes among Canadian youth. Each anecdote provides unique insight into the daily lives of newcomer students from around Canada.
Deadline: None
Contact info: Share your story at narrativesofnewcanadianyouth@gmail.com

Illustrations of Children's Health

Information: Illustrations of Children's Health writes and illustrates children's books about common illnesses. Young children often have difficulty understanding diseases, and the organization helps them develop a positive attitude toward different health situations.
Deadline: None
Contact info: Apply here or reply to ammmyzhu515@gmail.com with your resume

Follis

Information: Follis is an online education initiative that strives to bring philosophical ideas and arguments into our daily lives through bimonthly seminars on urgent societal topics like AI and climate change. Currently, they're looking for several co-organizers to put together online workshops across the world.
Deadline: None
Contact info: Google Form or reply to maeeee26@outlook.com with your resume

Melodic

Information: Melodic is a registered student-led NPO supporting foundations that provide musical education for under-resourced schools.
Deadline: None
Contact info: Reply to ggu26@ucc.on.ca with your resume

Health Access for All

Information: Do you want a community where everyone can find and afford healthcare? If so, join this emerging student organization.
Deadline: None
Contact info: Reply to healthaccessforallnpo@gmail.com with your resume

Muggle Muggle

Information: Muggle Muggle is a club that combines Harry Potter, business, and art to develop community through appreciation for the magical world. From designing and creating products to advertising and selling them, Muggle Muggle members share their fun items with others and donate proceeds to selected charities.
Deadline: None
Contact info: Reply to MuggleMuggle_24@outlook.com with your resume

Mosaic Minds

Information: Mosaic Minds is helping neurodivergent youth within Toronto by addressing the significant gap in services and resources available to them and their families. They are looking for Toronto students with website design, networking, public speaking, filming, or editing skills.
Deadline: None
Contact info: Reply to nancyxiao2027@gmail.com with your resume

YoungArts

Information: Are you a 15- to 18-year old visual, literary or performing artist? The 2026 YoungArts application opens in July 2025.
Deadline: likely mid-October
Contact info: Website

Behavioral Blueprint

Information: Are you curious about behavioral science, consumer psychology, or the future of AI? Want to unpack how biases, culture, and AI shape—and manipulate—what we click, choose, and buy? The Behavioral Blueprint podcast is growing and looking for motivated collaborators to bring episodes to life! Open positions include audio editor, social media manager, and project manager. You don't need to be an expert—just curious, reliable, and excited about what they're building!
Deadline: None
Contact info: Reply to atw65@georgetown.edu with your resume

Kaleidoscope Magazine

Information: Student-led virtual publication *Kaleidoscope* publishes creative writing, art, and much more. The team is looking to expand the organization with potential for fundraisers and writing competitions to be planned in the future. Currently, Kaleidoscope is looking for website developers and contributing writers/artists. The magazine is open to multiple languages with no specific deadlines for submissions.
Deadline: None
Contact info: Form

PassNPlay Project

Information: The PassNPlay Project is a nonprofit organization founded by high school students in Toronto with an aim to provide sports opportunities for underprivileged youth around the world. The organization donates sports equipment, offers coaching sessions, and raises funds for sports programs. Currently, PassNPlay has nine chapters in the Toronto area, but they are looking to scale internationally. Students interested in establishing their own chapters in their local communities or schools are encouraged to join.
Deadline: None
Contact info: Email passnplayproject@gmail.com with your resume.

International Youth Forum 2025

Information: International Youth Forum 2025 is a developing virtual international conference on adolescent mental health hosted by BC Youth in Canada and is looking for students to participate. The conference will include a mix of panel discussions with mental health professionals as well as breakout sessions for student groups to strategize and provide feedback on event programming and other initiatives. The conference will be held August 22-24, 2025.
Deadline: Unknown
Contact info: Website

30-Day Me

Information: 30-Day Me is an app designed to help users build habits and achieve personal growth through structured 30-day challenges. The platform offers daily progress tracking and AI-powered challenge recommendations to support users in forming routines. 30-Day Me is looking for partnerships with organizations or clubs that can benefit from customized challenge ideas tailored to members' goals.
Deadline: None
Contact info: Visit www.30day.me or contact Franklin Zhang at franklinzhang06@gmail.com and Sonya Zhang at sonyayzhang@gmail.com.

JQA International Environmental Children's Drawing Contest

Information: "If Earth could speak, what stories would it tell us? To help Earth remain beautiful forever, let's imagine what it might say and draw a picture of these messages."
Deadline: 31 May 2025
Contact info: Website

Connecticut Youth Legislative Advisory Council

Information: CYLAC (Connecticut Youth Legislative Advisory Council) is an organization that aims to promote youth voices in legislative affairs through policy proposals, testimony, advocacy, and hosting relevant events. We are Connecticut's first official Legislative Youth Advisory Council under the supervisor of CWESCO (Commission on Women, Children, Seniors, Equity & Opportunity), a commission of the CT State Legislature. There are openings in several committees.
Deadline: None
Contact info: Google Form

John Estey Student Writing Competition

Information: The 2025 John Estey Student Writing Competition is now accepting entries. This prompt is a quote from Le Guin's The *Left Hand of Darkness* and can be used as a first line, a last line, a jumping-off point, an inspiration for your students' work. They can use the entire quote or portions of it to write a fiction or nonfiction story, poem, song, scene, short monologue or other form of writing. Submissions should be 1,000 words or less.
Deadline: 23 May 2025
Contact info: Website

StarHaven

Information: StarHaven is a student-run digital publication that seeks to connect people worldwide interested in astronomy. They provide a platform to share not just the scientific aspects of space but also its beautiful, artistic aspects. We are currently accepting submissions for scientific astronomy or astrophysics articles; photography or visual art relating to space; and short stories or poetry inspired by our universe.
Deadline: 7 May 2025
Contact Info: contactstarhaven@gmail.com

All American High School Film Festival

Information: All American High School Film Festival is the largest student film festival in the world. Our festival offers an unparalleled experience designed specifically to promote and empower the future of film.
Deadline: 30 June 2025
Contact info: Website

NASA

Information: NASA's Office of STEM Engagement (OSTEM) paid internships allow high school and college-level students to contribute to the agency's mission to advance science, technology, aeronautics, and space exploration.
Deadline: 16 May 2025
Contact info: Website

John Locke Institute

Information: The John Locke Institute encourages young people to cultivate the characteristics that turn good students into great writers: independent thought, depth of knowledge, clear reasoning, critical analysis and persuasive style. Our Essay Competition invites students to explore a wide range of challenging and interesting questions beyond the confines of the school curriculum.
Deadline: 31 May 2025
Contact info: Website

IEEE MTT-S International Microwave Symposium

Information: All eligible students or student teams are invited to participate in the International Microwave Symposium 2024 Student Design Competitions (SDCs). The competition encourages students to employ creative problem solving and gain practical design experience by developing a circuit, or system to address a problem stated in the competition rules while following specified constraints.
Deadline: 23 May 2025
Contact info: Website

Ayn Rand Institute

Information: For nearly four decades, the Ayn Rand Institute has hosted annual student essay contests on Ayn Rand's novels. These contests encourage students to seriously engage with Rand's ideas through reflection on her profound and influential novels.
Deadline: Not yet released
Contact info: Website

Penn Law Pre-College Academy

Information: The University of Pennsylvania Carey Law School's Pre-College Academy offers high school students a unique opportunity to immerse themselves in a law school environment, typically reserved for first-year law students. This three-week program is the only of its kind where classes are held in an actual law school.
Deadline: Rolling since December 2024; apply ASAP
Contact info: Website

Jane Austen Society of North America

Information: JASNA conducts an annual student Essay Contest to encourage the study and appreciation of Jane Austen's works in new generations of readers.
Deadline: 2 June 2025
Contact info: Website