General Assemblies

Legal

ILMUNC XLII

Dear Delegates,

I would like to begin by congratulating you for joining us in this quite interesting and exciting challenge of taking part in the 6th Legal Committee of ILMUNC XLII! We are thrilled to have the opportunity to chair this committee, to listen to your innovative ideas, and, last but not least, to get to know you better. My name is Arwen Zhang, and as the chair of this committee, I look forward to guiding you through engaging and impactful discussions that explore various aspects of international peace and security.

This Legal Committee focuses on topics related to advancements in gene engineering and privacy in the age of artificial intelligence (AI). With the wave of increasing advancements in past years, a collective international effort is more essential than ever before to develop regulations and standards in regards to ethical, social, political, and economical concerns. Both AI and gene engineering have become incredibly prevalent in our everyday lives, and we look forward to hearing your ideas on how to best regulate and address such activities.

I am a sophomore in the Huntsman Program, studying Finance in the Wharton School of Business and International Studies in the College of Arts and Sciences, with an additional minor in Hispanic Studies. I'm from Columbus, Ohio, and went to Dublin Jerome High School, where I participated in my high school's Model UN club. This will be my second conference that I have helped to plan with ILMUNC and hope that you all have an enriching and valuable experience! Outside of ILMUNC, I am a part of Penn Mock Trial, Wharton Women, and Penn International Impact Consulting. I'm interested in international law and business, especially in exploring economic development. I love swimming, reading, and exploring all Philly has to offer with my friends.

We are all looking forward to working with you in the 6th Legal Committee. Don't hesitate to reach out if you have any questions regarding the committee.

Best,
Arwen Zhang

Dear Delegates,

Welcome to the 42nd Ivy League Model United Nations Conference! My name is Josh Levine, and I am honored to serve as an Under Secretary General of General Assemblies. Our secretariat has put so countless hours into creating a meaningful, exciting, and memorable conference. During the conference, I encourage you to dive into critical debates with an open-mind and pursue reasonable solutions. I am excited to welcome you to Philadelphia for the forty-second iteration of ILMUNC. On behalf of our entire secretariat, we cannot wait to open debate in January.

I am a current sophomore at the University of Pennsylvania from Needham, Massachusetts planning to major in Philosophy, Politics, and Economics with double minors in Data Science and American Public Policy. Outside of ILMUNC, I am a Project Lead for Wharton's Social Impact Consulting Club, an Executive Board Member for Penn Club Squash, and a research fellow for Penn Program on Opinion Research and Election Studies (PORES). I also have a background working in law and business, including two summers with the federal prosecutors in Boston. In my free time, I enjoy spending time with my friends, running, and supporting Boston sports.

Throughout the conference, I want you to focus on critical thinking, public speaking, and keeping an open-mind. These are skills that will serve you well at ILMUNC and beyond. We want to hear what you think about these pressing issues; we want to hear how you build your ideas, why you believe in them, and how you convince others to support your perspective. Also, take ILMUNC as an opportunity to push yourself out of your comfort zone—whatever that means for you. Speak up, make new friends, and take in all the amazing things ILMUNC and Philadelphia have to offer.

ILMUNC was made with you, the delegate, in mind. We built this premier conference for you to have the best possible experience, and we could not host this incredible event without you. On behalf of the entire secretariat, welcome to ILMUNC!

Best regards,
Josh

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Overview of the Body

The Legal Committee, formally known as the United Nations General Assembly Sixth Committee (C6), was established in 1947 and is one of the six main committees of the General Assembly. It serves as the primary forum for discussing international law and other legal questions related to the UN's work. While negotiations on specific legal issues may take place in specialized UN bodies, the Sixth Committee is where broader matters of international law are usually debated.

Figure 1. Photograph of the United Nations Hall

One of its central responsibilities is reviewing the annual report of the International Law Commission (ILC), a body created the same year to support the General Assembly in fulfilling Article 13 of the UN Charter. Beyond this, the Sixth Committee considers a wide range of reports and documents referred by the General Assembly, addressing both routine and pressing legal issues.

The Committee's agenda often includes recurring items such as: the promotion of justice and international law, accountability and internal UN justice matters, drug control, crime prevention, and combating international terrorism. For example, it annually addresses the resolution on "Measures to eliminate international terrorism," under which the General Assembly has adopted major international conventions in this field.

The C6 meets annually for about six weeks in parallel with the General Assembly's main session, beginning after the general debate and concluding by mid-November. Its work has historically shaped significant treaties and conventions, such as the 1961 Vienna Convention on Diplomatic Relations, the 1969 Vienna Convention on the Law of Treaties, and the 1997 International Convention for the Suppression of Terrorist Bombings.

In addition to its traditional focus on international law, the Committee has issued resolutions on topics ranging from counterterrorism and anti-corruption measures, to maritime law and the role of technology in armed conflict. At the upcoming ILMUNC conference, LEGAL delegates will continue this tradition by deliberating on two pressing issues of our time: Advancements in Gene Engineering (Topic A) and Privacy in the Age of Artificial Intelligence (Topic B).

Topic A. Addressing Advancements in

Gene Engineering

Introduction

In the past few years, scientists have made significant advances in the field of gene engineering, opening up the possibilities in genetic modification through the creation of new technologies. On one hand, this rapid growth has created innovations in healthcare, agriculture, and the environment. On the other hand, this has also led to a rise in complex legal and ethical concerns. While there is a vast potential for genetic engineering, it also raises concerns for regulation, equity, and safety, emphasizing the need for a comprehensive international legal framework.

Key Technologies

Background

Also known as genetic engineering, genetic modification is a process that alters the DNA makeup of an organism through the usage of laboratory-based technologies.[1] A person's DNA is in the shape of a double helix, which looks similar to a twisted ladder. [2]Genetic engineering can involve a few processes, one of which includes changing, deleting an entire region, or adding in a new segment of DNA. Genetic engineering also encompasses the process of inserting temporary or permanent pieces of foreign DNA from other organisms (also called a transgene). There are several key technologies involved with genetic engineering, and it has been applied to both research and industry purposes, spanning from crafting genetically modified plants to producing new cancer therapies.

CRISPR-Cas9

Perhaps one of the well-known and powerful tools used in genetic engineering, CRISPR-Cas9 (Clustered Regularly Interspaced Short Palindromic Repeats and CRISPR-associated protein) is known for its speed, efficiency, and cost-effectiveness in comparison to other technologies.[3] This technology was originally inspired by a naturally-occurring process of gene editing that bacteria use as immune defense when infected with viruses. [4]Essentially, bacteria will take and integrate bits of the viruses' DNA into their own DNA to create segments known as CRISPR arrays that allow the bacteria to "remember" the virus, so if it attacks again, the bacteria can cut the enzyme apart and disable the virus. Taking this process, CRISPR-Cas9 scientists were able to use a similar method to slice into DNA at specific areas to either insert, remove, or change it.

CRISPR-Cas9 has several critical applications, especially in developing experimental treatments for

1 https://www.genome.gov/genetics-glossary/Genetic-Engineering
2 https://www.genome.gov/genetics-glossary/Base-Pair
3 https://medlineplus.gov/genetics/understanding/genomicresearch/genomeediting/
4 https://www.jax.org/personalized-medicine/precision-medicine-and-you/what-is-crispr

inherited diseases such as sickle cell anemia and cystic fibrosis. After successful experimentation on mice, it is also being explored in its ability to treat and prevent various cancers, mental illness, and human immunodeficiency virus (HIV).[5] Despite its overall benefits, CRISPR-Cas9 does still have some limitations. First, the delivery of the genetic engineering to the right cells is a concern, as well as the efficiency of the process. Second, the technology is not always accurate, and although rare, there is a chance of having long-term effects on parts of the DNA outside the targeted region, which creates fears for patient safety.[6]

At the same time CRISPR-Cas9 has pushed forth the advancement of the medical field, it has also been a part of the growing discussion around the possibility of correcting mutations before birth by editing human embryos. This raises several ethical issues, especially surrounding the long-term implications of creating unintentional mutations. There is also the question of social inequality, especially regarding who has access to the technology and what changes can actually be made. [7]The bottom line still remains that editing the human germline, which means making changes to DNA that is passed down to future generations, remains generally illegal or strictly controlled in most countries.[8]

Gene Therapy

Gene therapy is a technique that works to fix a faulty gene or replace a defective or missing gene with a healthy gene. This is done to make the body more resilient and treat, fight, or prevent disease or medical disorders.[9] For diseases such as sickle cell disease, hemophilia (a condition in which a person's body cannot form clots when they bleed), and leukemia, gene therapy has proved effective in treatment, although most people can only access gene therapy through clinical trials as of now. The key difference between gene therapy and CRISPR-Cas9 is that gene therapy does not directly edit DNA and instead relies on delivering genetic material into the body.[10] Still, gene therapy also raises similar concerns to CRISPR-Cas9 technology in the future hereditary consequences it may have.

Gene Drives

Considered incredibly controversial, gene drives are a newer genetic engineering technology that overrides the Mendelian rules of inheritance; instead of there being around a 50% chance a gene will be passed from parent to its offspring, gene drives guarantee certain traits are

5 https://medlineplus.gov/genetics/understanding/genomicresearch/genomeediting/

6 https://pmc.ncbi.nlm.nih.gov/articles/PMC4975809/

7 https://innovativegenomics.org/crisprpedia/crispr-ethics/

8 https://www.jax.org/personalized-medicine/precision-medicine-and-you/what-is-crispr

9 https://www.genome.gov/genetics-glossary/Gene-Therapy

10 https://www.mayoclinic.org/tests-procedures/gene-therapy/about/pac-20384619

passed down with a 100% certainty.[11] Since they can be used to spread through populations rapidly, gene drives have been proposed as a potential solution to control the spread of diseases or pests. For example, some scientists have proposed utilizing gene drives to prevent mosquitoes from being able to carry malaria and spread them into the population, which would help reduce current transmission rates.[12] Gene drives have also been thought of as a management solution for invasive species or even to boost the population of endangered species.

Even with these potential benefits, there are several key concerns. The consequences of releasing gene-drive modified organisms into the wild are vast and unpredictable, there is a very high chance that there would be unintended impacts and effects on biodiversity. [13]Additionally, there is no current legal framework in place to manage these consequences that could occur if modified organisms cross international boundaries. Current environmental and biosecurity treaties, such as the Convention on Biological Diversity (an international treaty focused on ensuring the future conservation of biodiversity) lack provisions needed to address the future of gene drive development, so there needs to be strengthened legal foundations to address these issues. [14]

Applications

Healthcare

Perhaps one of the most prominent applications that gene engineering has in the field of medicine and healthcare. Technologies such as CRISPR-Cas9 and gene therapy were originally conceived for the possibility of revolutionizing how diseases are diagnosed, treated, and cured. These are most prominent applications:

Treatment of Genetic Disorders: One of the key uses for genetic engineering is the treatment of genetic disorders, since technologies such as gene editing offers a possibility for correcting the underlying causes of hereditary diseases such as cystic fibrosis, muscular dystrophy, and sickle cell anemia.[15] By correcting genetic mutations or even replacing defective genes entirely, clinical trials have already shown significant promise in treating patients.

Cancer Treatment: Genetic engineering can be used to develop personalized cancer treatments, such as CAR T-cell therapy, a type of gene therapy that alters a type of white blood cells to help them attack cancer cells. [16]Some types of these therapies are already approved by the United States Food and Drug Administration to treat

11 https://www.synthego.com/blog/gene-drive-crispr

12 https://www.ncbi.nlm.nih.gov/books/NBK379282/

13 https://www.ogtr.gov.au/sites/default/files/files/2021-06/guidance_on_gene_drives.pdf

14 https://www.cbd.int/

15 https://www.cff.org/research-clinical-trials/gene-editing-cystic-fibrosis

16 https://www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy/car-t-cell.html

various types of lymphomas and leukemias. This kind of treatment is typically seen as a last resort used when other methods aren't effective and can have very serious side-effects.[17]

Heritable Genome Editing: Heritable genome editing involves the editing of human embryos to prevent them from inheriting diseases before birth.[18] While this kind of technology has proven successful in safely treating an infant with a rare metabolic disease, there have also been cases in which it has been used to create "designer-babies" that have a set of desired or specific traits.[19]

While many medical applications for genetic engineering can save lives and treat serious genetic disorders, there is simply a lack of strong legal agreements to regulate the actual application of these new methods. There can be serious consequences in the future of altering the human genome, especially if the changes could be permanent and passed onto future generations.

Agriculture

Agriculture is another industry that presents opportunities and obstacles for gene engineering, specifically in addressing food insecurity and improving the resilience of the world's food systems in dealing with climate change, pests, and disease. These are some of the key implications:

Figure 2. Golden Rice

Genetically Modified Organisms (GMOs): GMOs are plants, animals, or microbes that have had their characteristic genetically altered, often to resist pests, drought, extreme temperatures, and various pesticides and chemicals.[20] One prominent example of this is the creation of Golden Rice, which was a type of genetically modified rice developed to produce vitamin A in order to address malnutrition and other health impacts caused by a deficiency.[21] While there is no evidence that GMOs pose a serious health risk, there has still been a rise in controversy against GMOs, especially in reference as to

17 https://my.clevelandclinic.org/health/treatments/17726-car-t-cell-therapy

18 https://www.ncbi.nlm.nih.gov/books/NBK447263/

19 https://www.chop.edu/news/worlds-first-patient-treated-personalized-crispr-gene-editing-therapy-childrens-hospital#:~:text=Ahrens%2DNicklas%20Laboratory-,In%20a%20historic%20medical%20breakthrough%2C%20a%20child%20diagnosed%20with%20a,now%20growing%20well%20and%20thriving.

20 https://www.genome.gov/genetics-glossary/Genetically-Modified-Organism-GMO#:~:text=GMO%20(short%20for%20%E2%80%9Cgenetically%20modified,Division%20of%20Genome%20Sciences

21 https://www.ebsco.com/research-starters/health-and-medicine/golden-rice

which companies are able to control the actual genetically modified seeds for crops.[22]

Livestock Engineering: In the same way gene engineering has been thought of as a solution to medical issues for humans, it is also considered a possibility to improve animal health and prevent the spread of diseases among livestock. Gene editing can be used to increase muscle and milk production in various animals, which can also be beneficial to long-term food security and production, since livestock can be genetically engineered to produce more. However, this raises the same issue of long-term issues in biodiversity and actual ethical concerns of fundamentally altering the DNA behind different species.

The rapid spread of genetically engineered organisms, both crops and animals, raises key economic, environmental, and ethical concerns. Different countries have different reactions regarding GMOs; several nations in Europe, South America, and Africa all ban the cultivation of GMOs as some even prohibit the import of GMOs, which creates trade disputes and inconsistent international regulations.[23] Moreover, many companies have been able to file and obtain patents on genetically engineered seeds and now control much of the world's seed supply, which raises another set of concerns about corporate monopolies and the future of small farmers. In the long term, there needs to be a balanced legal framework to both protect the innovation and support of a more robust international food system.

Environmental

The final industry that genetic engineering has played an increasingly important role in is environmental management, particularly in regards to conservation and restorations. Here are the key impacts:

Species Control: Gene drive technologies have been proposed as one of the most effective possibilities to control invasive or disease-carrying species, such as mosquitos. However, the most prominent issue is not just the long-term impact on biodiversity in altering the natural laws of inheritance, but also in the possibility of a reverse effect where gene-drive modified species become the invasive species in new ecosystems instead. This could create the possibility of a vicious cycle in biodiversity, where an original solution becomes another problem.

Reviving Endangered Species: While Jurassic Park may have been a fictional series, the theory behind it - taking bits of DNA to reproduce extinct species - is now being explored by scientists through genetic engineering. In August 2025, a company brought back the dire wolf, a canine species that went extinct ten thousand years ago, through the idea of "de-extinction", or reviving extinct species from genetic material of related organisms.[24]

22 https://www.forbes.com/sites/jennysplitter/2019/12/20/how-a-decade-of-gmo-controversy-changed-the-dialogue-about-food/

23 https://worldpopulationreview.com/country-rankings/countries-that-ban-gmos

24 https://time.com/7274542/colossal-dire-wolf/

While this could create potential benefits in helping preserve endangered species, it also creates serious long term concerns about human intervention into natural systems.

Figure 3. Genetically Engineered Dire wolves

Like many other kinds of genetic engineering applications, these environmental interventions have serious legal and ethical risks, particularly if these animals and organisms are released into the wild. Because nature does not follow international boundaries, it will be increasingly difficult for nations to regulate genetically modified species individually. Current international environmental and biodiversity agreements were not implemented with the reality of having genetic engineering technologies available, so there will need to be stronger international law designed to manage the environmental and social risks more effectively.

Recent Breakthroughs

The twenty-first century has seen a number of breakthroughs in genetic engineering that have expanded the scope of what was originally thought possible with these technologies. Many, whether it be CRISPR-Cas9 or gene therapy, have gone from theoretical concepts and research into actual clinical trials and successful real-world applications. But each of these innovations have serious consequences, both positive and negative, and will need international dialogue and new frameworks in regards to their regulation, ethics, and accountability.

One of the most well-known and controversial breakthroughs in genetic engineering occurred in 2019 with the world's first genetically edited babies. Chinese researcher He Jiankui announced that he and two other scientists had altered the genetics of a number of human embryos to make them resistant to Human Immunodeficiency Virus (HIV).[25] A total of three children were born from the edited embryos, and this experiment was widely condemned at an international level for its serious ethical violations, lack of transparency, and failure to receive any peer-reviews.[26] Additionally, the experiment had been done without informed consent or long-term safety data, so it was unclear how the descendants of any altered babies would react. Later on, He Jiankui and his collaborators were sentenced to prison by the Chinese government for illegal medical practices.

25 https://www.science.org/content/article/chinese-scientist-who-produced-genetically-altered-babies-sentenced-3-years-jail

26 https://www.ebsco.com/research-starters/religion-and-philosophy/he-jiankui-affair

While the intention behind this genetic engineering process may have been focused on helping prevent the future transmission of HIV, the actual impact could not be determined or evaluated. This case highlighted a serious lack of regulation at an international level. Even with the prohibiting of germline editing, there is no current global legislation that would ban similar experiments from occurring.

Since 2020, CRISPR-based technologies have also seen significant breakthroughs both in terms of actual technological advancements as well as applicational advancements. CRISPR technologies were successfully used to treat both transfusion-dependent β-thalassemia (TDT) and sickle cell disease, two serious blood disorders.[27] Although it was done in clinical trials, a patient's stem cells were successfully altered outside of their body and then reintroduced to produce healthy blood cells.[28] By 2023, the United Kingdom, the United States, and the European Union all went on to approve CRISPR-based therapies such as Casgevy and Lyfgenia as treatments for sickle cell disease.[29] This marked a huge turning point in genetic engineering: the legal approval for the usage of these technologies in clinical settings and set some foundational legal frameworks for this industry.

Still, even with these recent developments, including the previously mentioned revival of the direwolf in 2025, there are gaps in access, affordability, and intellectual property. Most of the treatments are incredibly expensive and being introduced in a select number of highly economically developed countries, which may prove dangerous in building more health disparities around the world. There is also a serious tension between innovation and accessibility, especially as more biotechnology firms control patents for key technologies and may block possibilities for more equitable healthcare.[30]

New CRISPR technologies, such as CRISPR-Cas12 and Cas13 have all allowed for even more targeted, efficient, and precise alterations than the original CRISPR-Cas9 technology. These new iterations try to mitigate the risk of unintended mutations by allowing scientists to make changes to DNA structures without even breaking the DNA strand.[31] Another technology altogether, prime editing, allows for scientists to directly change specific sequences instead of cutting into the strands of DNA, which makes edits even more precise and less disruptive in their process.[32] These new changes are still in the early stages of testing, but they have undoubtedly revealed an even deeper layer of possibilities in genetic engineering.

27 https://www.nejm.org/doi/full/10.1056/NEJMoa2031054

28 https://pubmed.ncbi.nlm.nih.gov/33283989/

29 https://www.fda.gov/news-events/press-announcements/fda-approves-first-gene-therapies-treat-patients-sickle-cell-disease

30 https://patentpc.com/blog/the-intersection-of-biotechnology-and-patent-law-in-deep-tech

31 https://pmc.ncbi.nlm.nih.gov/articles/PMC9650447/

32 https://www.nature.com/articles/s41576-022-00541-1

Still, these recent breakthroughs have continued to highlight a lack of strong legislation that can address the more ethical, social, and economical concerns these technologies bring into light.

Historical Context

Foundations of Genetics

The 1953 discovery of the double-helix structure in DNA by scientists James Watson and Francis Crick kickstarted the beginnings of the genetic engineering industry.[33] The discovery gave researchers their first understanding of how genetic information is carried, and it set the stage for future advancements into how those genetics function, mutate, and most importantly, can be manipulated. By the 1970s, scientists were starting to develop the very first iterations of tools that could be used to cut and splice DNA, which led to the creation of recombinant DNA (rDNA) technology.[34] A year later, the first genetically modified organism was created when researchers successfully inserted foreign DNA into a bacterial cell.

All these advancements, although very exciting, began generating fears in both the scientific community and the general public in relation to the future usage of these technologies. In response, the Asilomar Conference on Recombinant DNA was held in 1975 as a way to address and assuage these worries.[35] This was considered one of the first major international attempts to regulate genetic engineering and research, although it did not include any true legal consequences. Participants voluntarily agreed to follow guidelines focused on minimizing potential biohazards associated with recombinant DNA, which created a precedent for caution in the industry. This was a turning point in the regulation of the genetic engineering industry, since it recognized the serious need for oversight and would serve as the basis for future laws and international treatises.

The Human Genome Project

Launched in 1990 and completed in 2003, the Human Genome Project successfully mapped out the entire sequence of all human DNA, providing the foundation for future advancements in more personalized medicine and genetic research.[36] This historic and significant scientific milestone helped push forward the advancement of genetic research and medicine even more, although it did spark debates about genetic privacy, discrimination, and the usage of genetic data. As a response, several countries crafted and implemented laws prohibiting discrimination based on genetic information. For example, the Genetic Information Nondiscrimination

33 https://www.sciencehistory.org/education/scientific-biographies/francis-crick-rosalind-franklin-james-watson-and-maurice-wilkins/

34 https://www.genome.gov/25520302/online-education-kit-1972-first-recombinant-dna

35 https://dnalc.cshl.edu/view/15653-Asilomar-meeting.html

36 https://www.genome.gov/human-genome-project

Act (GINA), implemented in the United States in 2008, prohibits insurance companies from using genetic information in their eligibility, coverage, and premium decisions, and it prohibits employers from using that same information in hiring, firing, and promotion decisions. [37]

International Agreements

The Universal Declaration on the Human Genome and Human Rights, first created by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1997, established the foundational ethical principles of the purpose for human genetics.[38] Later endorsed by the United Nations General Assembly, this declaration laid the bottom line in genetic engineering: the human genome is part of the heritage of humanity and should not be subject to financial gain. Although the declaration was not legally binding, it served as one of the first international agreements to reflect the need to protect human rights at the same time the technologies in genetic engineering were truly starting to advance.

Later on, the discovery of CRISPR-Cas9 as a gene-editing tool in 2012 made international frameworks even more relevant. Unlike earlier technologies, CRISPR made gene editing faster, more precise, and more accessible. Its simplicity sparked a surge in research, clinical trials, and commercial interest that has continued into the present day. However, there is still a lack of oversight in this industry, despite various entities such as the World Health Organization (WHO) calling for more ethical review processes, a global registry of gene-editing trials, and better legally binding international frameworks.[39]

Topic B: Privacy in the Age of AI

Introduction

In the last decade, privacy has become far more than an abstract concept. Today, privacy means controlling access to sensitive information that often moves invisibly between devices, platforms, and companies. This now concerns everything from search histories to personal health data, financial records, and online activity. Most people do not realize how much data is constantly being collected about their lives across borders and jurisdictions.[40]

Artificial intelligence, or AI, has fundamentally transformed how this information is gathered, analyzed, and interpreted. AI-powered systems can sift through enormous amounts of data in seconds, identifying individual patterns and behaviors with extraordinary speed and accuracy. In 2025, a staggering 378 million people worldwide are active users of consumer-facing

37 https://www.eeoc.gov/statutes/genetic-information-nondiscrimination-act-2008

38 https://www.unesco.org/en/ethics-science-technology/human-genome-and-human-rights

39 https://www.who.int/teams/health-ethics-governance/emerging-technologies/human-genome-editing

40 https://digitallibrary.un.org/record/3896430?ln=en

AI tools, which has elevated new risks in the way digital platforms handle personal information.[41]

Facial recognition cameras have become a fixture of daily life in parts of the UK and China. For instance, London police made more than 1,000 arrests using facial recognition in the first half of 2024, raising urgent questions about transparency and civil liberties.[42] Predictive policing software, deployed in cities from Chicago to New Delhi, analyzes historical crime data to forecast future events, but if this data is incomplete or biased, whole communities can be unfairly targeted.[43] Targeted advertising uses algorithms to track online habits, purchases, and even conversations, often without meaningful consent from users. Wearable health devices record everything from sleep cycles to heart rate, but their privacy policies leave 68 percent of users concerned about data misuse.[44] The emergence of deepfakes has brought new anxiety around identity theft and impersonation.

The global scale of these technologies means privacy cannot be regulated by a single country or entity. Personal information crosses borders and is often managed by companies larger than many national governments, making international cooperation crucial for meaningful protection. The United Nations, which considers privacy a basic right of "human dignity and security," has repeatedly called for collaborative frameworks to address challenges posed by AI and digital platforms.[45]

In summary, privacy is a rapidly evolving issue shaped by ever-increasing data flows and powerful AI. Legislators, corporations, and everyday citizens share responsibility for developing solutions, but they must do so with awareness that the stakes are now global.

Key Terms:

Artificial Intelligence (AI): Machines that perform tasks usually requiring human decision-making and learning.

Data Privacy: The right to manage who has access to personal information.

Algorithmic Bias: Errors or distortions in AI outputs resulting from flawed or incomplete data.

Surveillance Capitalism: The commodification of private information for commercial gain.[46]

GDPR (General Data Protection Regulation): The European Union's sweeping data protection law, active since 2018 (Articles 5-7, 12, 17).[47]

Data Sovereignty: The principle that countries have

41 https://www.forbes.com/sites/bernard-marr/2025/06/03/mind-blowing-ai-statistics-everyone-must-know-about-now-in-2025/
42 https://www.bbc.com/news/articles/cdx5528xrzko
43 https://hai.stanford.edu/ai-index/2025-ai-index-report
44 https://termly.io/resources/articles/ai-statistics/
45 https://digitallibrary.un.org/record/764407/?v=pdf&ln=es
46 https://www.economist.com/by-invitation/2025/09/09/ai-agents-are-coming-for-your-privacy-warns-meredith-whittaker
47 https://gdpr-text.com/en/

the right to govern digital information generated by their citizens.

History of the Topic

The United Nations first made privacy in the digital context a priority in 2013, passing Resolution 68/167 that clarified the "right to privacy in the digital age" and signaled new dangers from unchecked government surveillance. This milestone document emphasized that personal privacy extends online, and governments must not violate fundamental rights when collecting digital information.[48]

Between 2014 and 2020, the UN issued additional resolutions outlining the ways digital technologies threatened personal security and called for greater transparency and accountability in surveillance operations.[49] The Human Rights Council responded by creating the Special Rapporteur on Privacy, whose reports warned that AI-powered data collection is accelerating rapidly, and national frameworks are often unable to keep pace.[50]

Outside UN circles, nations devised regional and national privacy laws. The European Union passed the GDPR in 2018, setting strict rules for data collection, consent, and deletion rights.[51] The regulation covers all companies that handle data about European citizens, no matter where the firm is based; as a result, thousands of global organizations redesigned their privacy programs, and more than €1.64 billion in fines were issued for violations by the end of 2024.[52]

Africa established its Malabo Convention in 2014 (ratified more broadly after 2023), but enforcement has lagged; many countries have not yet set up national data protection authorities as required.[53] In contrast, the United States uses a patchwork of sectoral laws such as the Privacy Act of 1974. These rules limit government misuse of data but let private companies set their own standards.[54]

Globally, the number of privacy-related AI incidents jumped by 56.4 percent in 2024, with 233 reported cases of privacy or security failures, according to Stanford's AI Index.[55] Violations ranged from unauthorized data access and algorithmic error to discriminatory consequences and costly regulatory fines. Despite growing awareness, fewer than two-thirds of organizations took concrete steps to

48 https://digitallibrary.un.org/record/764407/?v=pdf&ln=es
49 https://digitallibrary.un.org/record/3896430?ln=en
50 https://www.aljazeera.com/economy/2021/9/15/warning-of-risk-un-rights-chief-urges-ai-oversight-regulation
51 https://gdpr-text.com/en/
52 https://www.aidataanalytics.network/data-governance/articles/7-trends-shaping-data-privacy-in-2025
53 https://dataprotection.africa/wp-content/uploads/malabo_roadmap_Sept_2022.pdf
54 https://www.britannica.com/topic/Privacy-Act-of-1974
55 https://www.kiteworks.com/cybersecurity-risk-management/ai-data-privacy-risks-stanford-index-report-2025/

mitigate AI risks, leaving millions exposed to potential misuse and abuse.

By 2025, legislative mentions of AI increased over 21 percent across 75 countries, demonstrating that privacy in the age of AI is a major focus for policymakers, but global consensus and enforcement remain elusive.[56]

Current Situation

Today's privacy debates are shaped by data, risk, and rapidly shifting regulations. Around 68 percent of global users are concerned about privacy online, with 57 percent believing that AI is a substantial threat to their personal privacy.[57] Public skepticism is growing: 70 percent of Americans say they trust tech companies little or not at all to make responsible decisions about using AI, and 81 percent worry that their personal data is being manipulated in ways they do not approve.[58] Trust in AI companies decreased from 50 percent in 2023 to just 47 percent in 2024, reflecting worldwide unease about digital privacy.[59]

AI-driven privacy threats have led to a fundamental "implementation gap." Organizations mostly recognize that AI presents risks, but fewer than two-thirds have added new safeguards or governance frameworks. The lack of action has real-world consequences: 233 major privacy violations were recorded in 2024, costing businesses millions in regulatory fines, legal fees, and lost customer confidence.[60]

Figure 4. Representation of AI Surveillance Mechanisms

Policy trends have shifted noticeably. In the US, the Privacy Act Modernization Act is being considered in Congress to update the government's rules on data collection and give citizens clearer legal rights. The Department of Justice is enforcing new standards for cross-border data transfers, holding companies more accountable for how they store and share sensitive US information. In Europe, the ProtectEU initiative is promoting stricter privacy standards while also seeking lawful access to encrypted data for law enforcement by 2030, sparking a new debate over child safety and

56 https://hai.stanford.edu/ai-index/2025-ai-index-report
57 https://termly.io/resources/articles/ai-statistics/
58 https://www.pewresearch.org/internet/2025/04/03/how-the-us-public-and-ai-experts-view-artificial-intelligence/
59 https://www.kiteworks.com/cybersecurity-risk-management/ai-data-privacy-risks-stanford-index-report-2025/
60 https://www.kiteworks.com/cybersecurity-risk-management/ai-data-privacy-risks-stanford-index-report-2025/

surveillance.[61]

Around the world, more than 80 countries now use AI-driven surveillance for law enforcement, border security, and crowd management. The vast majority of these technologies are designed by a handful of multinational corporations, raising questions about accountability and regulatory control. In the UK's Metropolitan Police, facial recognition led to 1,000 arrests in just half a year, but there is still no specific law mandating transparency or protecting citizens against misuse.[62]

AI adoption is expanding rapidly in business, healthcare, and government. In 2025, the global AI market is projected to reach $244 billion, and more than 3.5 billion searches are processed by Google every day, each with potential privacy implications.[63] Large language models and generative AI platforms, such as ChatGPT and MetaAI, vary widely in their privacy approaches—some allow opt-out for data sharing, while others do not, putting personal information at risk.[64]

The regulatory landscape is becoming more fractured and intense. In 2024, there was a ninefold increase in legislative attention to AI since 2016, as nations hurried to keep pace with technological innovation.[65] Policymakers are debating how to balance innovation with meaningful safeguards, and multinational firms are lobbying for regulatory standards that can be met without losing global market share. Enforcement actions—fines, lawsuits, and orders to halt data collection—have become more common, yet consumers still report feeling confused or powerless.[66]

Geopolitically, the privacy debate is shaped by competition between the US and China, with both nations vying to set global standards for data protection and AI risk management. The EU is working to extend its privacy rules beyond Europe, hoping to promote a global approach stressing transparency and accountability. In authoritarian states and conflict zones, governments continue to use AI surveillance to monitor activists, journalists, and minorities, often without clear public oversight.[67]

Finally, many countries, especially in Africa and Latin America, lack the resources to enforce comprehensive privacy protections, making their populations more vulnerable. According to the Malabo Roadmap, over 30 states still have not built national data protection agencies,

61 https://www.aidataanalytics.network/data-governance/articles/7-trends-shaping-data-privacy-in-2025

62 https://www.bbc.com/news/articles/cdx5528xrzko

63 https://www.forbes.com/sites/bernard-marr/2025/06/03/mind-blowing-ai-statistics-everyone-must-know-about-now-in-2025/

64 https://blog.incogni.com/ai-llm-privacy-ranking-2025/

65 https://hai.stanford.edu/ai-index/2025-ai-index-report

66 https://hai.stanford.edu/ai-index/2025-ai-index-report

67 https://www.aljazeera.com/opinions/2023/6/13/ai-must-not-become-a-driver-of-human-rights-abuses

and less than half have applied global standards to AI data management.[68]

There is still no universal agreement on what "privacy" really means in the digital age, or how AI should be regulated without stifling innovation. The rules that do exist are frequently outmatched by rapid change and conflicting interests among governments, businesses, and citizens.

Potential Solutions

TOPIC A

Standardized Legal Frameworks: Updating national and international legislation is crucial to regulate gene-editing technologies. Frameworks should clearly define permissible uses of somatic and germline editing, establish ethical guidelines to prevent misuse, and ensure informed consent in clinical and research settings.

Safe Applications and Regulations: Categorizing gene-editing technologies by risk, and assuring stricter oversight for higher-risk applications would lead to more countries being open to GMOs.

Ethical Review Boards and Oversight Committees: Independent bioethics committees should be established at national and international levels to review and approve gene-editing experiments, particularly germline modifications.

Transparency and Reporting: Research institutions and biotech companies should publicly report gene-editing experiments, results, and potential risks. For this solution to not lead to unethical practices, mechanisms for oversight and whistleblowing should be established and implemented.

Research and Innovation Support: Governments and international organizations can fund research programs, provide grants, and support clinical trials.

TOPIC B

Standardized Legal Frameworks: Updating copyright laws and creating standardized legal frameworks is crucial to addressing AI-generated content. These frameworks should: define ownership, credit, and payment systems for AI-created works, establish ethical standards addressing bias, accountability, and explainability, and require transparency measures, such as labeling or watermarking AI-generated content.

Safe AI Applications and Regulations: These regulations should ensure that AI applications are secure, transparent, traceable, non-discriminatory, and environmentally sustainable. One example is making sure that facial recognition technologies work accurately across different skin tones and facial features to prevent bias.

Regulatory Sandboxes: They can provide controlled environments where companies can test new AI products and services under regulatory supervision. These

68 https://dataprotection.africa/wp-content/uploads/malabo_roadmap_Sept_2022.pdf

sandboxes encourage innovation without legal risks, allow regulators and stakeholders to assess AI's impact in real-world scenarios and promote collaboration between content creators, technology developers, and regulatory authorities worldwide.

Education and Public Awareness: Public awareness campaigns and education initiatives are essential to help society understand AI's role in the creative industries.

Potential Blocs

TOPIC A

Countries that are Pro-science, Innovation and Development of GMOs: Argentina, Australia, Bangladesh, Brazil, Canada, Chile, China, Colombia, Ethiopia, Mexico, Nigeria, Pakistan, Philippines, Portugal, South Africa, United Kingdom of Great Britain and Northern Ireland, United States of America.

This bloc is defined by its strong support for genetic engineering across diverse fields such as: agriculture, medical research, and biotechnology. These member states generally allow GMO crops to be grown, sold, and imported, as they often benefit from them through either economic means or food supply. However, many still require differing amounts of regulation, labeling, and oversight to ensure the safety of GMOs. When it comes to human genetic modification, several countries in this bloc permit gene-editing technologies for clinical treatment of diseases, while only a small number allow germline editing, given its emerging and highly sensitive nature. Delegates representing this bloc would benefit from advocating for increased GMO adoption in other countries, whether through trade or cultivation, and policies that decrease public distrust of GMOs.

Countries that are Not Opposed to GMOs: Burundi, Chad, Dominican Republic, Guatemala, Indonesia, Japan, Kenya, Lebanon, Malaysia, Singapore.

The countries from this bloc are generally receptive to the cultivation and commercialization of GMOs but are still in the process of developing legislation to regulate and oversee their use. Driven by economic considerations or food security needs, they could benefit from adopting GMO crops. In the meantime, most allow imports of GMOs and may implement voluntary labeling requirements. When it comes to human genetic modification, this bloc has yet to prioritize detailed legislation on either somatic or germline editing. However, in some cases, somatic gene-editing research is permitted in controlled settings. Delegates representing this bloc would benefit from supporting policies that mandate regular safety testing of GMOs and encourage the importation of nutritionally beneficial varieties. Although these states can be classified as "open-minded," many remain cautious and emphasize the need for careful monitoring and safety oversight before fully embracing GMO adoption.

Countries that Do Not Hold a Certain Position on

GMOs: Armenia, Belgium, Democratic Republic of the Congo, Egypt, El Salvador, Finland, Iceland, Jamaica, Jordan, Morocco, Nepal, Qatar, Sweden, Thailand.

This bloc prohibits the cultivation and commercialization of GMOs but often permits their import. Their stance is shaped by past negative experiences with GMOs, making them more cautious and inclined to apply the precautionary principle in policymaking. Most require clear labeling of GMO products and remain open to adoption only if safety for human health and the environment is firmly established. This same cautious perspective extends to human gene-editing. Delegates representing this bloc would benefit from advocating for mandatory labeling laws, strict regulatory frameworks governing GMO adoption, and expanded research and legislation on human gene-editing.

Countries Against GMOs: Albania, Algeria, Austria, Azerbaijan, Belarus, Croatia, Democratic People's Republic of Korea, Ecuador, France, Germany, Greece, Iran, Iraq, Ireland, Italy, Netherlands, New Zealand, Norway, Poland, Peru, Republic of Korea, Russia, Saudi Arabia, Switzerland, Venezuela, Yemen.

These countries from this bloc oppose the cultivation and commercialization of GMOs, though many permit imports under strict oversight and mandatory labeling requirements. Public concerns about potential health risks from consuming GMO crops are widespread, while governments in this bloc often express additional worries about the influence of multinational corporations selling GMO seeds. However, this cautious stance does not always extend to human gene-editing. Some states are open to permitting gene-editing in clinical settings, provided it is carefully regulated. Delegates representing this bloc would benefit from advocating for strong labeling laws, regular safety inspections of GMOs, and reduced pressure from GMO-exporting nations to accept imports. They may also support policies allowing regulated human gene-editing, though moral and ethical concerns mean they are unlikely to fully endorse its widespread use.

TOPIC B

Countries that are Innovation-Driven: Israel, Japan, Republic of Korea, United Kingdom of Great Britain and Northern Ireland, United States of America

This bloc emphasizes rapid technological growth and views AI as a driver of economic development, competitiveness, and national security. They generally resist overly restrictive regulations, favoring frameworks that allow flexibility and innovation in AI research and deployment. While these nations recognize the importance of ethical standards and oversight, their priority is ensuring that regulation does not stifle innovation. Delegates representing this bloc would benefit from advocating for policies that encourage cross-border collaboration in AI research, reduced barriers to private sector investment, and guidelines that balance innovation with responsible use.

Countries that are Conscious About Privacy: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Romania, Portugal, Singapore, Spain.

These countries prioritize human rights, data protection, and ethical safeguards over rapid technological deployment. They favor strong regulatory structures that prevent misuse of AI, particularly in areas like data privacy, surveillance, and discrimination. This bloc often advocates for global standards and binding international agreements to protect citizens from harm. Delegates representing this bloc would benefit from pushing for policies that strengthen transparency, enforce accountability mechanisms, and require human oversight in high-risk AI applications.

Countries that Have a Neutral Stance: Canada, Switzerland.

This bloc seeks to balance innovation with strong ethical and social considerations, often acting as bridge-builders in negotiations between other blocs. They support responsible AI use while also encouraging global cooperation and knowledge-sharing. Their emphasis lies in fostering dialogue, promoting international standards, and ensuring AI reflects broadly shared values rather than narrow national interests. Delegates representing this bloc would benefit from advocating for collaborative approaches, frameworks for international dialogue, and flexible regulations that allow both innovation and safeguards.

QARMA (Questions a Resolution Must Answer)

TOPIC A

- What policies or initiatives has your country implemented in the past to address the ethical implications of genetic engineering? Are they enforced stringently?
- What future strategies or commitments is your country prepared to pursue in advancing scientific and genetic engineering research?
- How does your country seek to balance the pursuit of medical innovation with the ethical considerations it raises?
- What genetic engineering technologies are currently being researched, developed, or applied within your country?
- What is your nation's stance on the genetic modification of humans? Is it moral?
- Does your nation participate in the genetic modification of crops? Is it used as the main food source for your nation's population?
- Is genetic modification economically beneficial for all nations involved? How may it differ depending on the country?

TOPIC B

- What measures has your country implemented, or could it implement, domestically to prevent harm from AI and protect citizens' rights?

- How does your country regulate, or plan to regulate, the use of AI in military applications and warfare?
- What strategies does your country support to balance the benefits of AI with its potential risks and societal impacts?
- How does your country safeguard personal data, and what further steps could it take to strengthen privacy protections?
- What policies does your country advocate to ensure transparency and accountability in AI development and deployment?
- How does your country address bias, discrimination, or misuse of AI in decision-making processes?
- What responsibilities does your country believe private technology companies should have in protecting citizens' privacy?
- What role does your country see for international cooperation or standards in regulating cross-border AI and data flows?
- How does your country educate its citizens about AI risks, benefits, and privacy protections?
- What measures does your country support to protect vulnerable populations from AI surveillance or misuse?

Conclusion

As gene engineering and artificial intelligence continue to evolve and intertwine, they bring profound possibilities alongside significant ethical and privacy challenges. How can we strike the right balance between innovation and protection? What frameworks are needed to safeguard individual privacy without stifling scientific progress? These questions are crucial as we navigate this new frontier, and it is now up to the LEGAL delegates to shape the policies that will define the future of these powerful technologies.