IMUN 2026 Research Report

HRC Issue #4: The question of the ethical and societal implications of genetic alteration of human embryos.

The process of genetic alteration of human embryos, also known as "Designer Babies," is a prevalent new topic, with significant potential human rights issues. The advancement of technologies such as Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) technology has progressed at an astounding rate and is the main technology used in genetic alterations, not only in humans. T Human genome editing can do anything from modifying hair and eye color to removing harmful genetic mutations Scientists can now remove completely dangerous DNA variants, saving lives ("We need"). CRISPR has saved hundreds of lives using its genetic alteration technology, but the use on unborn children has still sparked debate (Hamzelou).

The first known case of gene editing on human embryos was announced on the 29th of November 2018, with mixed reactions (Ma et al.) The lead scientist for this project was He Jiankui. Jiankui successfully used CRISPR to edit the genes of three embryos, creating immunity to HIV. Despite the positives of this achievement, Jiankui was later jailed by the Chinese government due to his violations of several ethical regulations. Many scientists also argued that Jiankui put the embryo's life at risk due to the possible untested side effects of using gene editing technology. Jiankui, though, insists that the three children remain healthy, although his claims haven't been verified (Travis).

Technologies as divisive as genetically engineering for human embryos requires a sustainable and widespread solution. Currently, countries such as the United Kingdom and China

allow for human genetic embryo alteration research, but do not allow these embryos to gestate. The United States outlaws all human genetic embryo altering but does allow for embryo selection. On the other hand, countries like South Africa have recently shifted their regulations, allowing for leniency in regard to reproduction using these altered embryos (Baylis et al).

Delegates should center their debate on the balance between the moral implications and lives that genetic alterations can save. Debate should not particularly fixate on religion, although many countries are likely to be opposed to genetic alteration due to opinions that it is an example of humanity tampering with embryos made by a higher power. Instead, debate should center around the embryo's inability to consent to genetic alteration, and if this moral dilemma outweighs the lives that human embryo modification may save (Joseph). The debate should also bring up Designer Babies. Designer Babies differentiate themselves from general embryo modifications by specifically altering the embryos in ways that do not necessarily save their lives, or by selecting embryos for specific traits. This could include selecting the babies' gender, appearance, and even traits like intelligence and athleticism (Rung).

Works Cited

Baylis, François, et al. "100+ countries have outlined legal restrictions on editing human embryos. Here's a guide." Science Literacy Project, 15 Jan. 2021, geneticliteracyproject.org/2021/01/15/100-countries-have-outlined-legal-restrictions-on-editing-human-embryos-heres-a-guide/. Accessed 2 June 2026.

Hamzelou, Jessica. "More than 200 people have been treated with experimental CRISPR therapies." MIT Technology Review, 10 Mar. 2023, www.technologyreview.com/2023/03/10/1069619/more-than-200-people-treated-with-experimental-crispr-therapies/. Accessed 2 June 2026.

Joseph, Andrew. "Gene-editing, religion and one scientist's quest to reconcile the two." PBS News, 14 Oct. 2016, www.pbs.org/newshour/science/gene-editing-religion-scientist. Accessed 2 June 2026.

Ma, Yuanwu, et al. "The first genetically gene-edited babies: It's 'irresponsible and too early.'" National Library of Medicine, 11 Jan. 2019, pmc.ncbi.nlm.nih.gov/articles/PMC6431114/. Accessed 2 June 2026.

Rung, Rosalie. "Can We Create Designer Babies with Gene Editing?" Healthline, Healthline Media, 7 Feb. 2025, www.healthline.com/health/pregnancy/designer-babies. Accessed 2 June 2026.

Travis, John. "An embryo editing 'first' is more complicated than headlines suggest." Science, 8 June 2026, www.science.org/content/article/embryo-editing-first-more-complicated-headlines-suggest. Accessed 9 June 2026.

"We need to talk about human genome editing." Nature, 8 Jan. 2025, www.nature.com/articles/d41586-025-00015-4. Accessed 2 June 2026.