

Researched Persuasive Writing and Speaking

Gene Editing: Scary Science

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The human race has always been fascinated with supernatural and perfect ideals. In ancient mythologies, people idolized gods who were disease-free and possessed superhuman powers. Modern society strives to achieve a slightly more scientific approach in the form of gene editing. However, by doing so, we are giving up 2000 years of evolution in our blinding pursuit of superhuman abilities. Natural human evolution has sifted through the human race to create an ideal genome for our environment. Gene editing is an impediment to this natural evolution, poses detrimental safety issues, risks the fate of future generations, and makes a future of designer babies unavoidable.

Currently, gene editing faces safety and precision issues as attempts to cure one disease can spark other unprecedented problems. The immaturity of the technology, as it has only been in use since 2012, can cause off-target edits on the complex human genome, making it difficult to predict the consequences. According to Harris (2017), since “we don’t know the roles of most of our genes,” we can’t know the risks involved in editing them. What we do understand is that “the genome is an ecosystem. Everything is in some kind of balance,” therefore, editing one quality may lead to mutations in another (Harris,2017). Evincing the dangers of gene editing, researchers in China edited embryonic genes, aiming to treat an inherited blood disease, the result, however, was unintended and dangerous mutations. Furthermore, Dr. M.Weiss, chair of the hematology department at St. Jude Children's Research Center, revealed that “investigational gene therapy even led to cancer in some patients” (Press,2015). The intent behind research into gene editing was to find cures, yet it only seems to provoke more issues.

Equally important is that gene editing constitutes unacceptable hereditary implications for future generations through germline editing. Germline editing, editing

human eggs to make gene alterations heritable, is a step towards crossing an ethically inviolable line since future generations cannot consent, and long-term negative effects, such as mutations, may not be apparent for years. One mistake could harm future individuals through inheritance of that mistake in every cell. Although parents frequently make decisions for their children without their consent, the decision to edit the germline will prove detrimental to the entire human race. Forty countries have recognized the urgent threat of inheritable errors, finding it imperative to ban germline editing (Mercola,2017).

Germline editing is not only a contentious topic for negatively impacting future generations, but also because it allows parents to “custom-order” babies, making a future of designer babies inevitable. A Pew Research survey found that 46% of adults support germline editing to cure diseases, but 83% of the adults recognize that this practice will lead to its “escape from regulatory limits, to its adoption for enhancement purposes” (Harris,2017). Picture this: a world where every baby is genetically predestined for an Ivy League acceptance letter, Angelina Jolie’s looks, or Beyoncé’s vocal range. With this also comes a growing apprehension regarding access, that we could find ourselves in a world where only society’s elite would have children who are considered “biologically superior to the rest of us” (Belluck,2017). The emergence of market-based eugenics would exacerbate existing discrimination, inequality, and conflict.

In conclusion, gene editing will cause dangerous mutations, and prove detrimental to future generations as well as our society by allowing enhancement of humans. Human evolution is a constant process of adaptation to the environment. Any expectations to churn out superhuman characters through gene editing could potentially trigger our extinction. We must tread with caution, as such manipulation will not be reversible.

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