Controversy over biotechnology assignment

Technology



Controversy over Biotechnology Biotechnology has been the source of lots of controversy. There are those that love Biotechnology and dream of all the great things it could bring to mankind. There are also those who see it as threat to mankind, something that could possibly overthrow our current society. James Watson, who along with Francis Crick discovered the double helix structure of DNA, exerts that this controversy is not deserved. He believes that it is pertinent for our future, that it could benefit mankind.

Francis Fukuyama, a professor at John Hopkins School of Advanced International Studies and author of the influential best seller Our Posthuman Future, insists that "... our compulsion to control and manipulate natural processes, including the human genome, will ultimately undermine nature itself (Fukuyama 668). " This viewpoint is concerned with conserving mankind as it is. There must be a place in between, a stance that both sides agree on. The double helix structure, the foundation of modern Biology, is still relatively new, only being discovered in 1953. As with any powerful new technology there is uncertainty about its potential uses.

Watson shows this to hold true to biotechnology by pointing out that people are afraid of the possible outcomes of further research in the field of Genetic Engineering. People fear that this technology could fall in the hands of evil, and that tampering with our own genetics could seriously disrupt human civilization. Nothing of this sort, however, has happened yet. Thus far Genetic Engineering has been very safe, but limited. Is it safe to assume that scientists will keep learning and mastering Genetic Engineering, using their new found abilities for good?

Scientists have not been able to experiment with inserting genetic material into human sperm and egg cells. No government wants to be the one that initiates the redirection of human evolution, therefore nobody has the funds to do research. There is a widespread fear that we do not have the wisdom to improve our own genetic makeup. Watson thinks we could develop that understanding. Watson reveals that so far, nobody has been hurt by genetic research and that it does not make sense that we stop progress because of fear of something that may never happen.

Is it really just an issue of safety to the individual, or could there be a much bigger problem? Fukuyama insists that "... the attempt to master human nature through biotechnology will be even more dangerous and consequential than the efforts of industrial societies to master non human nature through earlier generations of technology." (Fukuyama 668)

According to Fukuyama human genetics are much like an ecosystem in nature, everything is dependent on something else and if one small thing is changed there will be a series consequences to follow.

Fukuyama goes on to say that Human genetics are much more intricate and that we will never understand all of the complexities of human genes.

Scientist seeking to help mankind will end up hurting mankind. Fukuyama validates this viewpoint by alluding to outcomes of past attempts of man to control nature. Maybe Watson is absolutely right. Perhaps all we would need is time and opportunity to research and learn more about human genes.

Currently we do not possess enough understanding to create any sort of "superhuman." It would take many years to obtain that kind of understanding.

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Even when or if we do reach that point that kind of technology would probably only be used to prolong and better human life. So would there really be a threat to mankind? If first attempts don't succeed it would not simply be overlooked. These scientists are not monsters and they don't want to create monsters. An immediate halt would take place until an understanding of the problem was established. Better procedures would then be developed before further attempts. Fukuyama says that there are dangers involved in tampering with human gene code. Perhaps Fukuyama is right, perhaps man has no business tampering with our own genes.

Who knows, trying to correct nature in an area that we have very little knowledge could destroy mankind as we now know it. Thomas Jefferson concluded that all people are equal because nature made it that way. If we try to improve on mankind we could create a superior creature; that would essentially make the concept of equal rights invalid, changing the principles upon which our government is based on. Where do we draw the line? Both sides of the dispute want the best for humanity, they just have different goals in mind. The side of Watson wants to help humanity overcome death and disease.

Fukuyama's side wants to protect humankind from potential dangers and damages that could be caused by altering human genes. Both arguments seem logical, but there has to be some place in the middle. To stop the progress of Biotechnology and its potential benefits would be absurd. At the same time, expecting only good and prosperous outcomes out of altering human gene code and trusting that no damage will be done is foolish. What is the middle ground? We need more funding, more education and heavily https://assignbuster.com/controversy-over-biotechnology-assignment/

controlled research and testing. There are many elements to consider when it comes to making this decision.

Fukuyama argues with the principle that man should not interfere with nature; he backs this up with examples of how man has already screwed up ecosystems by trying to fix them or improve them. Watson uses the opposite approach explaining that improving human genetics would improve mankind as a whole. Fukuyama holds that taking nature's job into your own hands is unethical, where Watson finds that it is unethical to be restrained by the mere idea that something could go wrong. There are two possible consequences. One being that mankind eventually creates a "superhuman" that is above the normal man.

The other is having the chance to help human life and passing it up. The smartest decision would be not taking either of these risks. There needs to be government sponsored and restricted research and testing. Before moving on to anything more advanced there needs to be a complete understanding. Works Cited Fukuyama, Francis. "In Deence of Nature, Human and Non-Human." Crusius, Timothy W and Carolyn E Channell. The Aims of Argument 5th Edition. Mc Graw Hil, 2006. 668-670. Watson, James. "All fo the Good: Why Genetic Engineering Must Soldier On." Crusius, Timothy W and Carolyn E Channell. The Aims of Argument. Mc Graw Hill, 2006. 665-667.