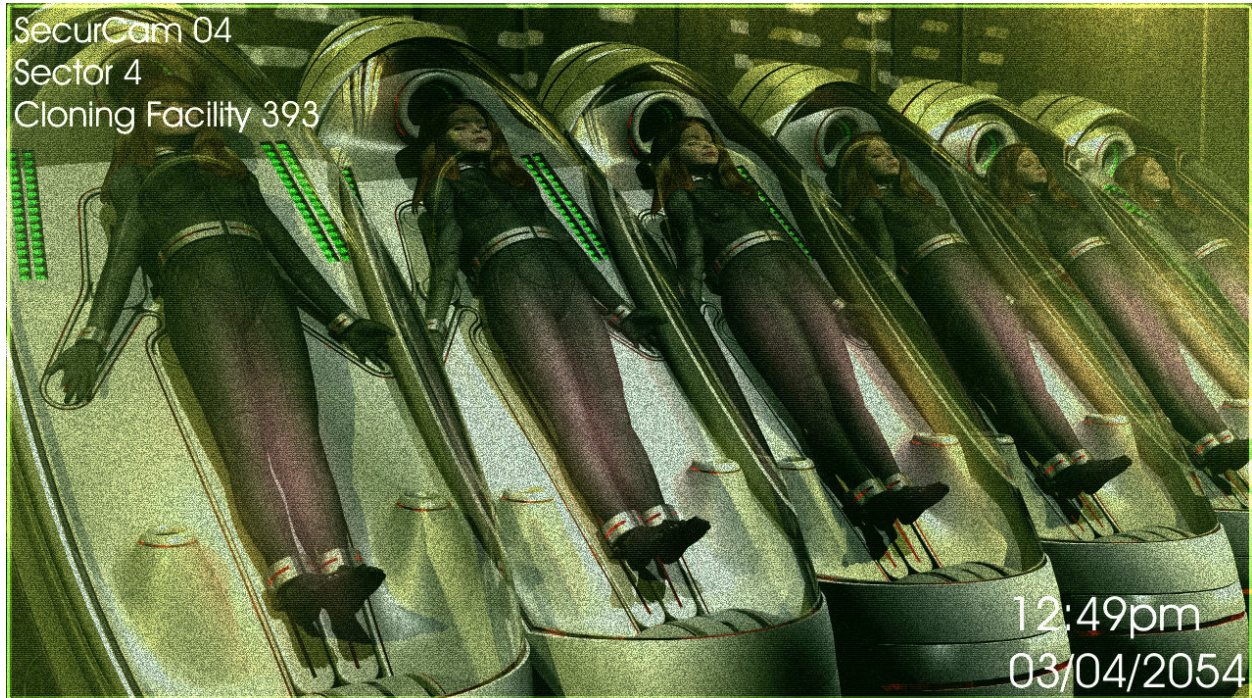


Cloning: New World Advancements

AtoZ. "Clones by Jarm Poser Science Fiction." *Renderosity*,



<https://www.renderosity.com/mod/gallery/clones/536690/>.

Noor Imran

Writing of the Sciences 21003

It's 2054 and your mother is going through Multiple Organ System Failure and you don't want to accept her death yet and with new technology you can clone her organs in replacement for a longer life. So you agree to the procedure and hope for the best, being a person of color you are already weary of how this medical procedure will go, but nonetheless to save your mother's life you take this step. You think of Henrietta Lacks whose cells contributed so much to science and thank her in your mind.

In an interview with Rebecca Skoort and Amy Goodman, Skoort explained how she was intrigued by how little people knew about Lacks' life, who her family was and where she came from. Skoort understood the distrust the Lacks family had with those who approached them. They



were used and probed without their consent for research.

On top of that they were unaware that the cells were being used for research and were recently given credit. They also had their medical records leaked to the public without their consent. All of Lacks' five kids were used in research along with one child that was disabled and was sent to the "Home of Crazy Negroes," to be used for research if their mother's cells were genetic. They were heavily mistreated and deceived by the public and then chose to stay silent.

Someone claiming to be a lawyer even offered to help sue Hopkins. Unfortunately, the Lacks family ended up getting sued. Lacks' sister, Debora, did not trust Skoort whatsoever with information about her family, especially regarding her sister. By

already being a person of color in America, they had a justified distrust in the way they would be treated in the medical field. Debra and her family were particularly hesitant about opening up to Skoot, yet she stayed persistent because Henrietta Lacks deserved to be known in the field of medicine. She slowly started to give in to the researchers because she wanted to know more about her sister.

Scientists were mostly fascinated by the fact that Henrietta Lacks cells did not die, they multiplied every 24 hours, which to this day is still a phenomenon. Scientists were able to keep cells alive for up to 24 hours before they died. George Gey, the head of the Tissue Culture Research was fascinated by the cells' abilities to multiply and offered them to whoever asked and in no time her cells were all across the globe again without her consent. The recurrence of Lacks cells being acquired over and over without her consent became a phenomenon itself.

Nonetheless, her cells have been used in advancements in the medical field. They have been increasingly used in testing the effects of radiation and toxins, to research the human genome, to understand more about how viruses function and operate, and to help create the polio vaccine which helped millions across the globe, leading to the discovery of a specific type of cloning.

Although the United States is considered to be the land of the immigrants, and the top country in medical advances along with China threatening their leaderboard, it has its own unfortunate downfall; racism. Racism is deeply rooted within an abundance of systems in the United States such as the criminal justice system, education system, and particularly the medical system which many people of color suffer from to this day. The Tuskegee syphilis study, in which hundreds of Black men with syphilis were never given their diagnosis or that they were not being treated for the lethal disease, is one topic that keeps coming up, according to Molina that further increased their distrust in the government and moreover the medical professionals

themselves. This is one of the many occurrences, along with Henrietta Lacks and her family, showing how people of color are constantly used for the purpose of medical breakthroughs but receive neither the reimbursement or credit they deserve.

Furthermore, in cloning, the transfer of nuclear material from a somatic cell into an enucleated egg with the objective of generating embryonic cell lines with the same genome as the nuclear donor is known as therapeutic cloning. They remove the oocyte nucleus as a result. Now in your mother's case from the year 2054, you would want to have the same organs so the body would not be able to reject the new organs. With technological advancements and new research studies, the clones of your mother's organs would be able to help her live a longer and healthier life. Along with your mother's life, therapeutic cloning could also benefit the production of patient-specific embryonic stem cells which are important in the developing studies of disease and clinical trials according to the National Library of Medicine. With human medicine, there is also the upcoming possibility of animal breeding, the re-establishment of endangered species such as the Javan rhinoceros, and the production of transgenic livestock. With the use of therapeutic cloning, scientists would not need to use egg cells as well because the somatic cells would substitute in their place and resolve the issue. This research technique could very well be therapy applied to treat certain diseases detrimental to human life such as diabetes and Parkinson's disease. This valuable medicine tool could succeed if gone about the ethical and safe way, to prevent situations like the Henrietta Lacks' immortal cells controversy and unjust treatment. As a result, medical practices such as therapeutic cloning, need to be reviewed so that human right violations like using someone's private medical information or history without their consent.

By 2054, one can strongly hope that a mother struggling from Multiple Organ System Failure can clone her organs for a longer life through the use of therapeutic cloning, regardless of the color of skin, demographic, or cultural background. Medical procedures should be held at their utmost ethical standards and hopefully therapeutic cloning can be used to promote beneficial advances in human health and prolong life.

Works Cited

AtoZ. "Clones by Jarm Poser Science Fiction." *Renderosity*,
<https://www.renderosity.com/mod/gallery/clones/536690/>.

Shoichet, Catherine E. "The US Has a Horrifying History of Forced Sterilizations. Some Fear Hysterectomies in Ice Custody Could Be a New Chapter." *CNN*, Cable News Network, 16 Sept. 2020,
<https://www.cnn.com/2020/09/16/us/ice-hysterectomy-forced-sterilization-history/index.html>.

"Web Bonus: Rebecca Skloot on 'The Immortal Life of Henrietta Lacks.'" *Democracy Now!*, https://www.democracynow.org/2018/10/12/web_bonus_rebecca_skloot_on_the.

AO;, Trounson. "Future and Applications of Cloning." *Methods in Molecular Biology* (Clifton, N.J.), U.S. National Library of Medicine,
<https://pubmed.ncbi.nlm.nih.gov/16988390/>.

"The Value of Therapeutic Cloning for Patients." *BIO*,
<https://archive.bio.org/articles/value-therapeutic-cloning-patients>.