

CRISPR and the Transhumanism Movement: Civilian and Military Ethics Reassessment Looming

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Introduction

- **Transhumanism** is a philosophical movement that promotes enhancing humans using technology to transcend physical and mental limitations
- **CRISPR-Cas9** is a modern technology that allows for target gene editing

Methods

Throughout the semester, the 4R resilience modeling framework was utilized to analyze transhumanism and CRISPR technologies.

1. **Resistance:** prevention of the threat
2. **Recovery:** restoring the most important functions of the system
3. **Retention:** maintaining the most important functions of the system
4. **Resurgence:** considering opportunities to strengthen the system

Subject matter experts were interviewed:

1. Dr. Andy Anderson, lecturer at Utah State University, biology department
2. Dr. Ryan Jackson, professor at Utah State University, biochemistry department
3. Carl Youngblood, CEO and president of the Mormon Transhumanism Movement

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CONCLUSION

Emerging biotechnologies will drastically affect civilian life and military practices.



Bionically altered soldiers with superstrength, and endurance may be closer than anticipated. CIA Director, John Radcliffe, claims that China has conducted "human tests" on members of the People's Liberation Army with the aim of developing super soldiers that are soldiers with biologically enhanced capabilities.



Results

Germline Therapy Advances – CRISPR Technology Raises Bioethical Concerns Over Costs Versus Benefits

- With medicine and biotechnology advancing, it is becoming more likely that CRISPR will be utilized in human genomes, causing bioethical and societal ramifications to become reality in the future. By understanding potential consequences and establishing early regulations now before CRISPR is normalized, the impact of negative consequences can be lessened.

Genetic Editing, Transhumanism, Supersoldiers May Change Future Warfare – New Defense Strategies Needed

- Supersoldiers with genetically enhanced attributes and/or incorporations with bionics are on the horizon and will require new assessment and strategies for future warfare between countries as biotechnologies such as CRISPR and neuro-networking are advancing.

Technology Advancements Provide Opportunities for Bionic Humans, AGI, Neuralink – Wary Cyberattack Vulnerabilities

- Modern technology has the capability to modify genes to enhance human cognition and physical attributes as well as create a brain-computer interface that will allow humans to become bionic and keep up with the exponential growth of technology; research and experimentation is taking place and further education and measures to be put in place to ensure safety and maintain human interest.

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