Human cloning and stem cell research

Science, Biology



Human Cloning and Stem Cell Research Scientific research has in the last few decades have made stunning advancements in a broad array of fields. Some of the most prominent advancements have occurred in terms of human cloning and stem cell research. This technology holds a wide variety of implications both for medicine as well as for the accompanying ethical concerns. Institutions such as the Roman Catholic Church have found themselves in direct conflict with secular scientific perspectives that hold firm to the belief that such technology is not only effective but also necessary for the progress and betterment of humanity. This essay examines prominent scientific and ethical elements related to human cloning and stem cell research.

While the nature of human cloning and stem cell research has a number of important medical implications, these notions are always accompanied by the ethical concerns of biotechnology. In considering current usages of genetic engineering one is able to establish a more broad ranging understanding of these questions; in these regards, genetic engineering finds widespread use in agricultural procedures, as well as genetically engineered animals ('Ethical Issues'). As scientists experiment animal engineering questions emerge regarding what constitutes human cloning, as human genes have been inserted into animal organisms ('Ethical Issues'). Stem cells specifically are biological cells found in multicellular organisms. Research has allowed scientists to artificially grow or replicate these cells that can be used in medical therapies.

Stem cell research and human cloning poses a number of widespread benefits to humanity. Indeed, it's been indicated that this technology could potentially be implemented to aid, "debilitating diseases and disabilities, including Parkinson's and Alzheimer's diseases, diabetes, heart disease, liver disease, and spinal cord injury" (Lindsay, p. 228). Still, Federal funding has oftentimes been withheld from such research among arguments that such research kills an entity that is the equivalent of a person. While theology has ostensibly objects to cloning and stem cell research in terms of religious doctrine, it's clear that even from a secular perspective the process poses a number of concerns. In these regards, if stem cell experimentation is allowed groups worry that eventually full-scale human cloning will occurs (Lindvall). Questions emerge concern the potential of human/animal chimeras. While such considerations are somewhat sensational, one also considers the moral issues that are raised in-terms of humans that are cloned. Such individuals would lack the traditional upbringing or family structure. Ultimately, it's clear that no clear answers exist to these questions.

In conclusion, this essay has examined stem cell research and human cloning. In these context of understanding it has examined broad ranging uses of genetic engineering as well as the nature and process of stem cell treatments and the potential for human cloning. In addition to these aspects some of the complex moral questions regarding both stem cell research and human cloning have been considered. While a variety of opinions exist both for and against these medical processes, it's clear that no clear and distinct answers are available. Ultimately, it will be necessary to proceed with a concern for medical progress and potential for future ethical pitfalls.

References

Ethical Issues in Biotechnology.

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