

Controversial Research: Embryonic Stem Cells and Obesity Vaccines

In the field of biomedical research, people are often excited when the results of their research are controversial. It evoked limited attention when Cell, a scientific journal in the US, recently reported that some Japanese scientists at Kyoto University claimed that four genes or factors transformed mouse cells to act like ESCs (Embryonic Stem Cells). In contrast, a lot of excitement was created recently when the US, Massachusetts-based, Advanced Cell Research (ATC), claimed in a paper published in Nature that it had created ESCs without destroying the embryos, as this would seem to remove the principal objection to stem-cell research. It has just been revealed that contrary to previous claims the team did in fact destroy the embryos according to two "clarifications" issued by the journal Nature. This latest controversy comes only months after the blog-based takedown and public trial of South Korean ESC researcher Hwang Woo Suk.

The supporters of ESCs believe that cells from embryos would be used to treat degenerative diseases and injuries of human beings in the future. However, this research has become controversial, since the early-stage embryo is damaged during the process of development. Patrick Goodenough (<http://www.CNSNews.com>) says that it might be possible to generate ESCs through non-embryonic methods, as shown by the Japanese professors, including, Shinya Yamanaka and Kazutoshi Takahashi. Australasian Bioethics Information, a bioethics clearinghouse, said that making an adult cell revert into ESC would be "one of the great dreams of regenerative medicine." The agency added that, "If this (Japanese) success can be replicated with human cells, it might indeed transform America's stem cell politics."

When The Results of the Research Are Controversial: US and Stem Cell Research

One of the biggest controversies in medical research in the 21st century is whether the human embryos need to be destroyed for creating cells that would be used to cure degenerative disorders and certain diseases. The US government allots limited budget to stem cell research. The US President George W Bush recently vetoed a bill which would have brought more investment into ESC research. There are serious critics within the US Congress of ESC research. According to www.swissinfo.org, Pascale Steck of the Basel Appeal against Genetic Technology, an organization opposing stem cell research, says that people are wondering where these researchers would get the embryos for research purposes and who would decide the usage of the resulting stem cells. Patrick Goodenough says that many people who are opposed to ESC research believe that more funds and attention should be given to research that use adult stem cells that involves non-controversial sources including bone marrow, umbilical chords and lining of the nose.

When The Results of the Research Are Controversial: Vaccines for Obesity

Recently a team of Californian researchers mentioned in the proceedings of the National Academy of Sciences (NAS) that they have developed a vaccine to combat obesity and weight gain. However, Dr William Colmers, A Professor of Pharmacology at the University of Alberta is not convinced by the Californian researchers. Colmers, while cautious about the finding of this controversial research, believes that there must be some potential dangers attached with it.

When the results of the research are controversial, it draws people's attention. This can lead temptations to exaggerate claims, and finally the field itself, like ESC research, becoming controversial. But controversial results can lead to even more new developments as researchers strive to resolve the controversy with new solutions.

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