

Stem cell biology and its complications by gina kolata

[Science](#), [Biology](#)



The paper "Stem Cell Biology and its Complications by Gina Kolata" is a delightful example of an article on biology. An article by Gina Kolata in New York Times in 2010 demonstrates that the debates around stem cell research have taken a new turn with the possibility of using Induced Pluripotent Stem Cells (IPSC) instead of extracting stem cells from human embryos (Kolata, 2010). Kolata explains that stem cells have drawn significant scientific interest due to the inherent ability of the cells to grow into organs of desire upon manipulation. However, Kolata outlines that the major challenge to stem cell research is that they are extracted from human embryos, a fact that has drawn ethical criticisms and sparked off debates. The possibility of extracting stem cells from IPSC cells instead of human embryos created a new possibility of solving the ethical problem. Kolata explains that studies with IPSC are not yet conclusive due to the fact that different laboratories use different programming strategies, and there is also the need to compare the IPSC with embryonic cells to determine their potency as stem cells. Therefore, even with the new discoveries, the need to use human embryonic stem cells is inevitable. The major ethical debate in the use of stem cells is that the cells are obtained from human embryos and that the approach amounts to killing. There is usually the possibility of using no-viable embryonic cells instead of using the ones that have the potency of growing into fetuses. However, studies by several scientists have established that IPSC cells still "remembered" their original tissues and could therefore not be used as stem cells. In my opinion, humanity should make a sacrifice by allowing credible scientists to study embryonic cells in detail so that in future we can be able to program other cells to behave like stem cells. Although the

scope seems to be farfetched, it might have huge positive results for science and humanity.