

Adam Macfarlane

Bio 1090

News Analysis #2

1. Cite the name of the news source, the article title, the date, and the byline (the reporter's name). Paste a link to the article here (in Canvas).

Dume, Bel. "Lab-Grown Neurons Could Help Scientists Repair Damaged Brain Tissue." *Scientific American*, 2016.

2. What are the main conclusions of the scientist(s)?

IPSCs (induced pluripotent stem cells) are similar to embryonic stem cells in that they can self replicate and differentiate into any type of cell in the body. These ISPCs can be used to produce nerve cells and are able to be transplanted into damaged brain tissue and function.

3. What are some possible impacts this information could have on society or on individuals?

There are huge benefits that can come of this. Certain conditions that used to be untreatable, primarily once involving neuronal damage, soon could be and all without the ethical dilemma of using embryonic stem cells. Induced pluripotent stem cells are made from matured cells that have been made to become stem cells again as if they were young embryonic cells. This means stem cells won't have to be harvested from embryos.

4. Are other scientists, or policy-makers, mentioned as being in disagreement with the research scientists? If so, what might make you tend to take their doubts seriously (or not take them seriously)?

There doesn't appear to be anyone in opposition to it.

5. Are scientists mentioned in the article affiliated with a nonpartisan group, like a University or Government, or affiliated with a for-profit corporation? If the latter, do you suspect that altered their conclusions?

This article was sponsored by AXA Research Fund and is independent from Scientific American which is where I got it from. I'm not familiar with the group or its position or reputation, but I don't think they're being really dishonest. I didn't really see anything about problems with the research or what could be wrong. They did say that a lot more research was needed, so I'm not really skeptical.

6. In what ways did the article change and expand your views of the topic? If it did not change or expand your views, describe what you knew about the subject before reading the article.

I wasn't even aware that this was a thing. iPSCs seem pretty amazing. Like I mentioned before, if and when these can be put to use, ethics shouldn't be a worry anymore as it won't be from embryos. Embryonic stem cells were still going to be the only way to use stem cells as treatment, then I'm not really sure what side I'd be on. I guess before I knew what it really was I saw nothing wrong with it. Now? I still think it's worth using for people who can hardly function if not treated. iPSCs will fix the ethics eventually though.

7. Do you think the reporter did a good job or a bad job of giving background for the story? Please give an example to support your opinion.

They explained the iPSCs well enough for someone familiar with the topic. Other than essentially saying "this has potential to fix neurons and brain damage", a lot of people probably wouldn't know what a stem cell is or what makes it unique much less what's different about iPSCs and ESCs. So the average person might not be able to tell the importance of having an alternative to embryonic stem cells for treatment without context.