

Antonio Waters

AP Seminar

12/2/18

As the world we know it moves towards the future, advances in science and medicine are always in motion as well. A big advance for the world is stem cells, with their predicted ability to cure those incurable diseases such as Cancer. Stem cells are defined as biological cells that can differentiate into other types of cells and can divide to produce more of that same type of stem cell. These types of cells are found in multicellular organisms such as humans. When it comes to stem cells, many are still in the battle of determining if it will help or hurt us from all areas. One of those areas is our economy. A weak economy can easily destroy how well we survive and thrive. It very well is the most important area to focus on because it grants stability and organization for countries. It's basically a spine for a country and without a spine your paralysed. When it comes to stem cells not very much is known about it so a large amount of research and funding must go in without guarantee of great results. Therefore, the impact stem cells can have on the economy is very significant as it could make or break our nation. This begs the question, should society continue the development of stem cell research?

Many people have different opinions on the matter but a number of professionals in the area believe the economy will benefit from this research. Jonathan Thomas, chairman of the California Institute of Regenerative Medicine(CIRM), explains how his work with CIRM has helped the economy with jobs and state revenue. He states that “We’ve created thousands of jobs” and that at CIRM “We have shown that we are going to be, by 2014, generating over 200 million net revenues to the state”(KCRW). Based on this the economy has two improvements,

short term and long term. Short term impacts were the increase in jobs and the long term impact would be revenue due to successful research which would then transfer to successful therapeutic use. With jobs already increasing the economy is already seeing benefits. Outside of California Dan Gincel, director of Maryland Stem Cell Research Fund, found that in only 2 years “investments by his fund had directly led to the creation of 500 jobs and had an indirect economic impact to recipients of \$71 million”(Crain’s Detroit Business). Overall highlighting that the economy is receiving growth due to stem cell research as seen with Dan Gincel and Jonathan Thomas.

With stem cell research still young there is a lot of time with and countless predictions of its effect on the economy. Many like Gil Van Bokkelen, chairman of the non-profit Alliance of Regenerative Medicine in Washington DC and CEO of the Ohio-based biotech firm, Athersys, believe that over time stem cells will grow to prove useful therefore helping the economy. In a quote from KCRW, Bokkelen explains what he thinks will happen over the next several years. He shares that he believes there will be the clinical evidence highlighting the massive impact that stem cells have. With this evidence he then explains that we can “overcome some of the rising tide of pressure that we’re trying to fight against...” due to “... very expensive disease conditions”(KCRW). If this prediction is correct, with many having similar predictions, the economy will see massive growth as stem cells after already creating so many job opportunities, now will bring a large amount of revenue that can go into economic savings and strongly put up a battle against expensive common conditions. These conditions include examples like Cancer, Diabetes, Arthritis, etc. that all are extremely costly due to their consistent treatment methods that don’t cure.

In conclusion, stem cell research is a complex topic. Its impacts are still being calculated as no one is completely certain on what they could do. For our economy there are many views but a strong one as Gil Van Bokkelen predicts is that in our near future with the use of stem cells and their ability to cure diseases they will overall benefit the economy. Work involving Jonathan Thomas and Dan Gincel show that in short time the economy is already progressing greatly. Their results highlight that it is possible for the economy to flourish, in time, if we continue stem cell research.

Works Cited

- Henderson, Tom. "Stem Cell Research Can Spur Economic Growth, Researcher Says." *Crain's Detroit Business*, 5 Oct 2010, www.craigslist.com/article/20101005/FREE/101009937/stem-cell-research-can-spur-economic-growth-researcher-says .
- O'Neill, Stephanie. "The Economics of Stem Cell Research." *Southern California Public Radio*, 14 Oct. 2012, www.scpr.org/programs/madeleine-brand/2011/11/28/21535/the-economics-of-stem-cell-research/ .