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# Awareness and the Stem Cell Controversy: A Look into the Relationship between Knowledge and Opinion

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# AWARENESS AND THE STEM CELL CONTROVERSY:

A look into the relations between knowledge and opinion



There is a need to raise awareness about stem cell research in such a way that a broader audience is more apt to understand.

## Abstract

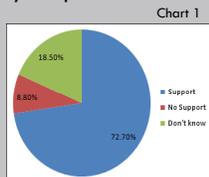
Since the introduction of stem cell research, there has been controversy over the use of embryonic stem cells. This controversy has been presented through a variety of means, such as on websites, documentaries and scientific journals. These arguments are rarely geared towards younger – or broader - audiences. There is, therefore, a need to discuss the controversy in a way that is more appealing to younger audiences, such that they will understand it and be able to formulate opinions. We did this by creating a website that is user-friendly to these younger people. By collecting data from surveys, we determined the sort of information that is most important for them to know and the sort of information that is unnecessary. We then made the information accessible on our web page.

## Project Goals

- Determine the correlations between what people know and what their opinions are.
- Present information based on these correlations.
- Present information in such a way as to make it appealing to and more understandable by a younger (or broader) audience.

## Data and Analysis

### Survey Response



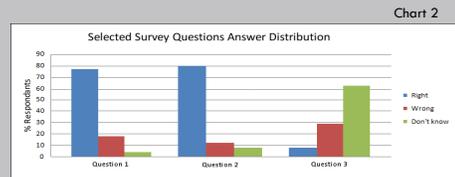
The above graph represents the percentages of respondents who either supported, did not support for various reasons, or did not know if they supported stem cell research.

People who did not support stem cell research cited multiple reasons as to why they did not support:

- 10% cited Religious Reasons
- 30% cited Ethical Reasons
- 20% cited Personal Reasons
- 30% cited both Religious and Ethical Reasons
- 10% cited Religious, Ethical and Personal Reasons

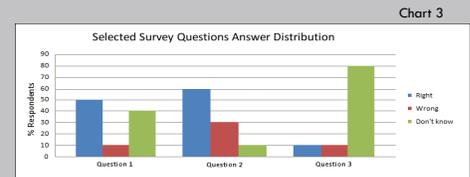
### Selected Survey Response Analysis

- Question 1: What are stem cells?
- Question 2: What is considered the main moral issue of hESC (Human Embryonic Stem Cell) Research?
- Question 3: How many countries have permissive/flexible policies on stem cell research?



The above graph shows the survey responses, for selected questions, of people who support stem cell research.

- Respondents who support stem cell research generally have a decent grasp on the basics of the science behind stem cell research.
- Respondents who support stem cell research have an understanding of the controversy surrounding embryonic stem cell research.
- When asked about more specific information, most people do not know as much, as can be seen in the graph of Question 3.



The above graph shows the survey responses, for selected questions, of people who do not support stem cell research.

- Respondents who do not support stem cell research have a weaker grasp on the science behind stem cell research.
- Respondents who do not support stem cell research have an understanding of the controversy surrounding embryonic stem cell research.
- Similar to the result in chart 2, the majority of respondents were uncertain of the answer to Question 3. This shows that this type of information is not a deciding factor in one's choice to support or oppose stem cell research.

## Website: The Stellar Potential



Based on the data collected from the survey, we developed a website that operates under the need to define the controversy surrounding embryonic stem cell research and promote its potential uses in healing the world. By filtering out the types of information deemed irrelevant by the survey results, we were able to develop a site that can be easily understood by all audiences.

### What the Site Provides:

- Information on the basics of stem cells
- Current and future applications of stem cell research
- Explanation of the controversy surrounding embryonic stem cells research

### What the Site Excludes:

- Unnecessary specific terms and explanations
- Unnecessary information (as determined by survey results)
- Confusion

### Means through which a younger audience is targeted:

- Catchy website title
- The use of a mascot – Stan the Stem Cell Guy
- The reduction of the use of scientific terms and explanations
- An aesthetically appealing website layout



## Selected References

- Do Not Harm: the Coalition of Americans for Research Ethics. <<http://www.stemcellresearch.org/>>.
- McLoren, A. (2007). A scientist's view of the ethics of human embryonic stem cell research. *Cell Stem Cell*, 1(1), 23-26.
- NHI Stem Cell Information. 15 Sept. 2008. National Institutes of Health, U.S. Department of Health and Human Services. <<http://stemcell.nih.gov/>>.
- Shapiro, R. S. (2008). Future issues in transplantation ethics: Ethical and legal controversies in xenotransplantation, stem cell, and cloning research. *Transplantation Reviews*, 22(3), 210-214.
- "History Of Stem Cell Research." *All About Popular Issues*. 2004. Oct. 2008 <<http://www.allaboutpopularissues.org/history-of-stem-cell-research-faq.html>>.
- "History of Stem Cell Research." *Explore Stem Cells*. 2006. Oct. 2008 <<http://www.explorestemcells.co.uk/historystemcellresearch.html>>.
- "Stem cell research." *UK Stem Cell Foundation*. 2007. Oct. 2008 <<http://domain88347.sites.foohosts.com/research/history.html>>.

## Conclusions

The website we developed can be considered a prototype for a bigger, more in depth idea. Future development of the website could, for example, include interactive media and a more professional layout. Also, the idea of raising awareness in a way that a broader audience would understand could eventually develop into another type of source, other than a website – for example, a documentary or a book. Stem cell research is one of the most rapidly growing fields in science and has an incredible amount of potential to change the world. The more people know about it, the faster this potential can be realized.