

WHO
World Health Organization
Stem Cell Obtention

Overview

The debate over stem cell acquisition has recently emerged in medical research and bioethics, driven by their potential to advance medical treatments.¹ Stem cell therapy can be used to treat a variety of diseases and injuries, including neurological disorders and cardiovascular diseases.² However, this topic is often contested due to the ethical implications of obtaining embryonic cells rather than just the scientific and medical aspects. The destruction of human embryos presents serious moral dilemmas that must be addressed, making the ethics of stem cell research a primary focus in global discussions.³ For this committee, the emphasis will be on these ethical concerns rather than the technicalities of the science itself, ensuring that all delegates can engage in a meaningful debate regardless of their scientific background.

The global response to this issue has been divided, with some countries implementing strict regulations and others promoting more liberal approaches to stem cell research.⁴ This difference in moral perspectives has sparked intense conversations within the scientific community, governments, and international organizations.*

What is WHO?

The World Health Organization (WHO) was founded in 1948 and is based in Geneva, Switzerland. The goal of this UN organization is to “lead(s) global efforts to expand universal health coverage” (WHO, 2025).⁵ The WHO also coordinates global responses to health

¹ Poliwoda, Salomon, et al. “Stem Cells: A Comprehensive Review of Origins and Emerging Clinical Roles in Medical Practice.” *Orthopedic Reviews*, U.S. National Library of Medicine, 25 Aug. 2022, www.ncbi.nlm.nih.gov/pmc/articles/PMC9404248/.

² Mayo Foundation for Medical Education and Research. (2024, March 23). Answers to your questions about Stem Cell Research. Mayo Clinic. <https://www.mayoclinic.org/tests-procedures/bone-marrow-transplant/in-depth/stem-cells/art-20048117>

³ “Examining the Ethics of Embryonic Stem Cell Research.” Harvard Stem Cell Institute (HSCI), hsci.harvard.edu/examining-ethics-embryonic-stem-cell-research.

⁴ Lowenthal, Justin, and Jeremy Sugarman. “Ethics and Policy Issues for Stem Cell Research and Pulmonary Medicine.” *Chest*, U.S. National Library of Medicine, Mar. 2015, [pmc.ncbi.nlm.nih.gov/articles/PMC4364318/#:~:text=Some%20of%20the%20most%20prominent,based%20intentionally%20\(5\)%20responsible](http://pmc.ncbi.nlm.nih.gov/articles/PMC4364318/#:~:text=Some%20of%20the%20most%20prominent,based%20intentionally%20(5)%20responsible).

⁵ “About Who.” World Health Organization, World Health Organization, www.who.int/about#:~:text=Founded%20in%201948%2C%20WHO%20is,the%20highest%20level%20of%20health.

**For this committee, we focus on ethical issues instead of diving deep into the scientific and medical specificities for the goal of a broad understanding between all delegates.*

emergencies and advocates for healthier living, from prenatal care to old age. The WHO is dedicated to advancing science while maintaining ethical integrity, navigating the challenges of stem cell research. While it is true that stem cell research has the potential to transform medicine, it is equally important to recognize the ethical dilemmas it presents. The goal is to educate and support laws that uphold ethical research practices, encourage the use of alternative stem cell sources, and ensure the benefits of stem cell research are accessible to all. By fostering communication among stakeholders and supporting innovative solutions, the aim is to contribute to a global framework that maintains ethical standards while advancing medical science.

Types and Importance of Stem Cells in Medical Research

Stem cells are unique cells that have the ability to develop into different types of specialized cells. These properties make them very useful for medical research and treatment.⁶ There are three main types of stem cells used in research and medicine. First, there are Embryonic Stem Cells (ESCs) that come from early-stage embryos and can develop into any type of cell in the body.⁷ Second, there are Adult Stem Cells that are found in various tissues, such as bone marrow and skin. These cells help repair damaged cells, but they have a more limited ability to develop into different cell types. Finally, Induced Pluripotent Stem Cells (iPSCs) are adult cells that scientists reprogram to behave like embryonic stem cells, making them a promising alternative to ESCs without ethical concerns (University of Utah, 2025).⁸

Stem cells have many important applications in medicine. Regenerative medicine focuses on using stem cells to repair or replace damaged tissues, which could help treat conditions like Parkinson's disease, spinal cord injuries, and heart disease.⁹ Additionally, stem cell research helps scientists understand how diseases develop and progress, leading to potential new treatment options. Clinical trials are already testing stem cell-based treatments, and as research continues, new therapies could emerge that improve the lives of millions of people.¹⁰

⁶ Ibid.

⁷ Ibid.

⁸ "The Stem Cell Debate: Is It Over?" The Stem Cell Debate: Is It Over?, University of Utah, learn.genetics.utah.edu/content/stemcells/scissues/.

⁹ Ibid.

¹⁰ Ibid.

Ethical Concerns

One of the main ethical concerns in stem cell research is the destruction of embryos to obtain Embryonic Stem Cells (ESCs). Some people believe that because embryos have the potential to develop into human life, using them for research is morally wrong.¹¹ This debate has led to disagreements among scientists, religious groups, and governments. Another ethical issue is consent rights, where donors must fully understand and consent to how their embryos will be used.¹² There are concerns about whether proper guidelines are followed when obtaining these embryos.

Global Response

Different countries have responded to these ethical issues in various ways. Some, like Germany and Italy, have strict regulations that limit or ban embryonic stem cell research. Others, like the United Kingdom and Japan, have more liberal policies that allow research under specific ethical guidelines.¹³ These global views demonstrate the various cultural and moral perspectives on the issue. One promising solution to the ethical controversy is the use of Induced Pluripotent Stem Cells (iPSCs), which avoid the need for embryos while offering similar benefits.¹⁴ Additionally, scientists are exploring synthetic or alternative sources of stem cells that could further reduce ethical concerns.

Conclusion

Stem cell obtention is a complex issue involving both scientific development and ethical concerns. While embryonic stem cells offer significant potential for medical advancements, their use raises moral questions.¹⁵ The global response varies, with some countries imposing strict regulations and others encouraging research under ethical guidelines. The World Health Organization believes in promoting ethical research practices, supporting alternative stem cell sources, and ensuring that medical advancements benefit all.¹⁶ By encouraging communication and innovation, the committee chairs hope to contribute to a responsible and progressive approach to stem cell research at the JCYMUN 2025 conference.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

Questions to Consider

1. What is your country's stance on stem cell obtention?
2. Does your country have regulations regarding the obtention of stem cells for research or medical use? If so, what are the ethical considerations and restrictions in place?
3. Has your country ever faced ethical controversies or public debates regarding stem cell obtention and research? If so, what were the key concerns?
4. Are there active regulations or government initiatives in your country regarding stem cell obtention and research?
5. What solutions has your country implemented to address ethical concerns surrounding stem cell obtention? (Such as alternative stem cell sources, regulatory frameworks, or public awareness campaigns?)

Useful Delegate Resources

[International Society for Stem Cell Research](#)

[NIH Stem Cell Information](#)

[UNESCO](#)

[Johns Hopkins Medicine](#)

[California Institute for Regenerative Medicine](#)

Works Cited

Mayo Foundation for Medical Education and Research. (2024, March 23). Answers to your questions about Stem Cell Research. Mayo Clinic.

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“Examining the Ethics of Embryonic Stem Cell Research.” Harvard Stem Cell Institute (HSCI), hsci.harvard.edu/examining-ethics-embryonic-stem-cell-research.