

Selected Stem Cell Resources Online

General Background

[NIH Stem Cell Basics](#)

<http://stemcells.nih.gov/info/basics/>

Offers both a longer explanation of stem cell research as well as a shorter 8-page version. Includes a hyperlinked glossary.

[University of Wisconsin Stem Cell Site](#)

<http://www.news.wisc.edu/packages/stemcells/>

Written for general audiences, includes some graphics

[Scientific American Article: The Stem Cell Challenge, June 2004](#) (Lanza and Rosenthal)

<http://www.sciam.com/article.cfm?articleID=000DFA43-04B1-10AA-84B183414B7F0000&sc=1100322>

Scientific American article on Stem Cell Research

[Stem Cells and the Future of Regenerative Medicine Online Book](#) (2002)

National Academies Press

<http://www.nap.edu/books/0309076307/html/>

Animations

<http://gslc.genetics.utah.edu/units/stemcells/>

Stem Cells in the Spotlight includes animations (geared at younger audiences)

<http://www.lifesciences.umich.edu/research/featured/tutorial.html>

New animation from the University of Michigan. Very thorough.

[Human Embryonic Stem Cell Online Animation \(requires Flash\)](#)

<http://www.stemcellresearchfoundation.org/WhatsNew/EmbryonicStemCells.htm>

Illustrates the basic steps in creating an embryonic stem cell line

[PBS Newshour Stem Cell Online Animation](#)

http://www.pbs.org/newshour/health/stem_cell_animation.html

Similar to the Stem Cell Research Animation

[PBS Online Newshour: Growing Stem Cells, 2004](#) (Streaming Video and RealAudio)

http://www.pbs.org/newshour/bb/health/july-dec04/stemcell_8-10.html

Lehrer Newshour feature on Stem Cells, including footage from the 2004 Democratic National Convention

Recent News

NY TIMES on Hwang Woo Suk and falsified data on human embryonic stem cell cloning.

http://topics.nytimes.com/top/reference/timestopics/people/h/hwang_woo_suk/?inline=nyt-per

Special Science Magazine articles on Hwang Woo Suk, including original papers
<http://www.sciencemag.org/sciext/hwang2005/>

Lesson Plans

<http://www.pbs.org/newshour/extra/teachers/lessonplans/august01/stemcells/>
PBS Newshour Extra Lesson Plan (internet research and advocacy brochure)

http://www.pbs.org/newshour/extra/teachers/lessonplans/science/adult_stemcell.html
PBS Newshour Extra Lesson Plan (students use a worksheet to find basic information on the internet, and then use a graphic organizer to collect and discuss information on adult vs. embryonic stem cell research)

Genetic Science Learning Center

Teacher Resources -> Classroom Activities -> Stem Cells in the Spotlight

<http://gslc.genetics.utah.edu/teachers/tindex/index.cfm?switch=single&unitid=stemcell>

Provides a variety of lessons related to Stem Cell Issues, including 'Meeting in Mutantville' (deciding whether to grant a business license to a stem cell company) and 'Embryos are Us' (a couple decides what to do with extra embryos from an in vitro fertilization procedure). A pre-assessment activity entitled 'What do you know about stem cells?' asks students to interview others about stem cell research.

NWABR Ethics in the Science Classroom Workshop

Teacher-Developed Stem Cell Lesson Plans

<http://www.nwabr.org/education/ethicslessons.html#ST>

This set of lessons uses some of the material from the Genetic Science Learning Center as well as from other sources (news articles, hypothetical scenarios) to investigate issues surrounding stem cell research. The complete set of ethics lessons from summer workshops is available online at

ENGAGE: Stem Cells

<http://www.stemcellnetwork.ca/engage/index.php>

This high school teaching resource on stem cell research was developed through the Ontario Genomics Institute (OGI) by Genome Canada, and the Joint Centre for Bioethics (JCB) at the University of Toronto. The '[Resource Package](#)' Link provides access to the full lesson plans:

<http://www.stemcellnetwork.ca/engage/materials.php>.

http://sciencecases.org/superman/superman_notes.asp

Saving Superman: A Look into Stem Cell Research

This is an online case-study approach that uses the story of Christopher Reeves. Background materials are also included. From the National Center for Case Study Teaching in Science, SUNY Buffalo: <http://ublib.buffalo.edu/libraries/projects/cases/case.html>.

National and International Policy

[History of Stem Cell Research and Policy](#)

<http://www.aaas.org/spp/cstc/briefs/stemcells/>

American Association for the Advancement of Science Brief (updated 2005)

[Politics of Stem Cells](#)

http://www.genomenetwork.org/articles/02_03/stem.shtml

2003 Genome News Article about US Policy

[US Stem Cell Map - Bloodlines PBS](#)

http://www.pbs.org/bloodlines/mapping_the_future/map.html

The map shows cloning and stem cell legislation in the US, current as of 4/03

[International Stem Cell Research Links from the NIH](#)

<http://stemcells.nih.gov/research/intresearch.asp>

Includes links to the International Stem Cell Forum and International Society for Stem Cell Research

[CBS News: UK Issues first cloning license, 8/04](#)

<http://www.cbsnews.com/stories/2004/08/11/health/main635359.shtml>

CBS News article comparing policy in UK, Korea, and US

The 'interactive' link in the bar on the right offers some graphics as well as quotes from different perspectives.

[Center for Genetics and Society: Lancet Report on International Policy](#)

http://www.genetics-and-society.org/resources/items/20040710_lancet_tauer.html

Lancet article on cloning, stem cell research, and international policy

[World Stem Cell Map](#)

<http://mbbnet.umn.edu/scmap.html>

The map shows relative levels of permissive/flexible stem cell research policies across the globe.

Ethics

[CNN: Ethics Matters with Jeffrey Kahn](#)

<http://www.cnn.com/HEALTH/bioethics/>

[President's Council on Bioethics](#)

http://www.bioethics.gov/topics/stemcells_index.html

Reports, transcripts, and background material

[International Society for Stem Cell Research](http://www.isscr.org/public/ethics.htm)
<http://www.isscr.org/public/ethics.htm>

[Remarks by the President on Stem Cell Research](http://www.whitehouse.gov/news/releases/2001/08/20010809-2.html), by George W. Bush, August 9, 2001
<http://www.whitehouse.gov/news/releases/2001/08/20010809-2.html>

❖ [Embryo Ethics: The Moral Logic of Stem Cell Research, New England Journal of Medicine](http://content.nejm.org/cgi/content/full/351/3/207)
<http://content.nejm.org/cgi/content/full/351/3/207>

Two members of the President's Council on Bioethics reflect on the use of embryonic stem cells from a moral perspective.

Advocacy Groups

Organization Promoting Adult Stem Cell Use
[Do No Harm: The Coalition of Americans for Research Ethics](http://www.stemcellresearch.org/)
<http://www.stemcellresearch.org/>

Organization Promoting Embryonic Stem Cell Use
[Coalition for the Advancement of Medical Research](http://www.camradvocacy.org/)
<http://www.camradvocacy.org/>

Latest News

[Stem Cell Research News](http://www.stemcellresearchnews.com/Stem_Cell_News.htm)
http://www.stemcellresearchnews.com/Stem_Cell_News.htm

A commercial, online newsletter that features stories about stem cells of all types.

[Yahoo! News](http://news.yahoo.com/fc?tmpl=fc&cid=34&in=science&cat=stem_cell_research)
http://news.yahoo.com/fc?tmpl=fc&cid=34&in=science&cat=stem_cell_research
Yahoo News Stories on stem cell research