

# Embryonic stem cells and Christian ethics

## An annotated reading guide

By Rod Benson

Director, Centre for Christian Ethics, Sydney

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For cells whose existence was only announced in 1998, human embryonic stem cells and the therapies that may develop from stem cell research occupy a remarkably prominent place in medical, ethical and (to some extent) theological discussions. This reading guide offers a selection of print and online resources on the nature and current applications of embryonic stem cells. The literature is voluminous and there are many good resources that are not listed here. An evangelical Christian theology informs the selection, and choices have been made with non-specialist readers in mind.

Many people feel overwhelmed by the technical jargon, the apparent “newness” of the science, and the complex nature of issues raised when thinking about stem cells and their potential use for research and therapies. Another problem is the potential for researchers, corporations and government agencies to present strongly biased information, and to use emotive or misleading language, in order to influence public opinion and policy makers. The websites and books listed below provide basic information on stem cells and related matters, although not all reflect a Christian perspective. Human cloning and other “cutting edge” issues in bioethics and biotechnology are not specifically addressed in this guide, although both the science and the ethics largely overlap.

### 1. Definitions: stem cells & stem cell research

#### [Stem cell basics](#)

A resource provided by the US National Institutes for Health.

#### [Glossary](#)

An extensive glossary of technical terms relating to stem cell from a US government report (2001).

#### [Stem cells](#)

A resource provided by the government agency Biotechnology Australia (for more information on stem cells click on the items under “stem cells” in the menu on the left of screen).

#### [Frequently asked questions](#)

A resource provided by the Australian Stem Cell Centre, a collaboration between academic researchers with the biotechnology industry to deliver commercial stem cell therapies.

#### [Stem cells clearly explained](#)

A brief outline from the Clearly.Explained.com website written by Australian scientist Richard Conan-Davies.

#### [How embryonic stem cell lines are made](#)

Simple interactive graphic from the DNA Learning Center, Cold Spring Harbor Laboratory, USA.

#### [Stem cell research](#)

Information (mostly from the US) on research using adult stem cells.

#### [Stem cell](#)

An article from the online collaborative encyclopedia Wikipedia.

## 2. News updates

### [Religion & Ethics Australia Digest](#)

A comprehensive review of news and opinion published weekly by the Centre for Christian Ethics, with regular items on a range of issues in bioethics and medicine. News articles and opinion pieces on stem cells and human cloning currently feature in every issue.

### [BioEdge](#)

A weekly review of bioethics news from the "independent" and socially conservative Australasian Bioethics Information.

### [Bioethics.com](#)

A comprehensive international bioethics news service from the US-based Center for Ethics and Human Dignity.

## 3. Selected books & chapters in books

- Cahill, Lisa Sowle, "Biotechnology, genes and justice" in *Theological Bioethics: Participation, Justice, Change* (Washington, D.C.: Georgetown University Press, 2005) 211-251. Note especially the section beginning "Stem cell research," pp. 225-235.
- Chapman, Audrey R., "Religious contributions to the debate on cloning" in *Unprecedented Choices: Religious Ethics at the Frontiers of Genetic Science* (Minneapolis: Fortress Press, 1999) 77-124. Includes a discussion of the theological ethics of human cloning - see pp. 98ff.
- Finkel, Elizabeth, *Stem Cells: Controversy at the Frontiers of Science* (Sydney: ABC Books, 2005). Finkel, a science journalist, discusses questions such as: Can embryonic stem cells really cure spinal injuries, as well as everything else from diabetes to Parkinson's disease? Could adult stem cells do the same thing? What are the moral and social costs of allowing such research? A useful general guide to the science and the ethical debates.
- Hauerwas, Stanley, "Must a patient be a person to be a patient? Or, my Uncle Charlie is not much of a person but he is still my Uncle Charlie" in Stephen E. Lammers & Allen Verhey (eds), *On Moral Medicine: Theological Perspectives in Medical Ethics* (second edition; Grand Rapids: Wm B. Eerdmans, 1998) 387-390. Argues that the notion of "person" no longer serves to protect the powerless and to protest injustices done to them.
- Jones, D. Gareth, "Cloning, stem cell technology and genetic modification: Reinventing the human person" in Mark L.Y. Chan & Roland Chia (eds), *Beyond Determinism and Reductionism: Genetic Science and the Person* (Adelaide: ATF Press, 2003) 16-35. Discusses the potential for biotechnology to control and manipulate, and perhaps create and repair, human persons.
- Hui, Edwin C., "Human cloning and stem cells" in *At the Beginning of Life: Dilemmas in Theological Bioethics* (Downers Grove: InterVarsity Press, 2002) 237-254. Argues that human cloning violates human dignity and threatens biodiversity. On stem cells and personhood see pp. 250-254.
- Lebacqz, Karen, "Alien dignity: The legacy of Helmut Thielicke for bioethics" in Stephen E. Lammers & Allen Verhey (eds), *On Moral Medicine: Theological Perspectives in Medical Ethics* (second edition; Grand Rapids: Wm B. Eerdmans, 1998) 184-192. Echoes Karl Barth's idea of human dignity as an "alien dignity" derived not from life itself, or from humans, but from God.
- O'Donovan, Oliver, "Again: Who is a person?" in Stephen E. Lammers & Allen Verhey (eds), *On Moral Medicine: Theological Perspectives in Medical Ethics* (second edition; Grand Rapids: Wm B. Eerdmans, 1998) 380-386. Reflects on the lawyer's question in Luke 10, "Who is my neighbour?" and on Jesus' reply. Claims that one can "see" the human face in the invisible blastocyst and zygote, but acknowledges that science cannot in principle prove that the unborn child is a person.

- Peters, Ted & Bennett, Gaymon, "Defining human life: Cloning, embryos, and the origins of human dignity" in Mark L.Y. Chan & Roland Chia (eds), *Beyond Determinism and Reductionism: Genetic Science and the Person* (Adelaide: ATF Press, 2003) 56-73. Discusses what constitutes morally protectable human life, and concludes that biological origin determines moral status; that the "fourteen-day rule edges out the moment of conception position"; and that "beneficence should be given larger place in ethical argumentation" (p. 73).
- Peterson, James C., *Genetic Turning Points: The Ethics of Human Genetic Intervention* (Grand Rapids: Wm B. Eerdmans, 2001). Note especially, in relation to stem cell research and biotechnology, the chapter titled "The purpose of technology from a Christian perspective: To sustain, restore, and improve," pp. 64-90,; and the section titled "Developmental steps," pp. 116-134, which discusses various theories about when personhood commences.
- Saunders, William L., "The human embryo in debate" in Charles W. Colson & Nigel M. de S. Cameron (eds), *Human Dignity in the Biotech Century* (Downers Grove: InterVarsity Press, 2004) 115-135. Discusses the moral status of the human embryo, with allusions to Nazi Germany and eugenics, and concluding that the human embryo - at whatever stage of development - must not be treated as a nonhuman or nonperson.
- Scolding, Neil, "Cooperation problems in science: use of embryonic/fetal material" in Helen Watt (ed.), *Cooperation, Complicity and Conscience: Problems in Healthcare, Science, Law and Public Policy* (London: The Linacre Centre, 2005) 105-117. Notes the strong pressure from government and mainstream scientific journals in favour of liberalisation of restrictions on embryonic stem cell research, and efforts at persuasion to cooperate in such research. Discusses the use of stem cells derived from adult human tissue and from animals.
- Snow, Nancy E. (ed.), *Stem Cell Research: New Frontiers in Science and Ethics* (Notre Dame, IN: University of Notre Dame Press, 2004). Discusses major questions, issues, and problems surrounding stem cell research.

#### 4. Selected articles (online)

- Abbott, Tony, "What's changed about cloning in only four years?" [Sydney Morning Herald](#), 30 Aug 2006.
- Cameron, Andrew, "Our ambivalence is sin," [Southern Cross, May 2002](#)
- Cooper, Donna, "The Lockhart Review: Where now for Australia?" [Journal of Law and Medicine](#) 14, 2006, 27-44.
- Fisher, Anthony, "Ethical and Practical Questions about the Embryonic Stem Cell Panacea," [Conference of the Faculty of Medicine, Dentistry and Health Sciences](#), University of Melbourne, 26 Jul 2002.
- Fisher, Anthony, "Ethical issues related to stem-cell research," [Cross-discipline Therapeutics: Advances in Stem-cell Therapy Conference](#), St Vincent's Hospital, Sydney, 31 August 2004.
- Fisher, Anthony, "The embryonic stem-cell panacea: fact or fiction?" [Second Brno Bioethics Conference](#), Brno, Czech Republic, 9 Oct 2004.
- Ford, Norman, "Ethical alternatives to research that destroys embryos," [Eureka Street](#), 6 Sep 2006.
- Lee, Patrick & George, Robert P., "The first fourteen days of human life," [The New Atlantis](#), Summer 2006.
- Pike, Greg, "[Briefing note on adult stem cells](#)," Southern Cross Bioethics Institute, 24 Mar 2002.
- Preece, Gordon, "Womb with a world-view," [BriefCACE 3](#), Aug 2003, 1-4.

- Singer, Peter & Sagan, Agata, "Choose life," [The Bulletin](#), 5 Sep 2006.
- Savulescu, Julian, "[Ethical issues raised by stem cell research](#)," Address to Annual Symposium on recent advances in stem cell science and therapies, Canberra, 6 May 2005.
- Sherley, James L., "Embryos aren't essential to stem-cell research," letter published in [Nature](#) 423, 22 May 2003, 381.
- Sherley, James L., "Human embryonic stem cell research: No way around a scientific bottleneck," [Journal of Biomedicine and Biotechnology](#) 2004 (2), 71-72.
- Sherley, James L., "To clone or not to clone," interview on [MercatorNet](#), 6 Dec 2005.
- Van Gend, David, " 'It's me prostate, Doc!': Your weekend dose of embryonic snake-oil," [Conscience versus Con Science](#) blog, 10 Sep 2006.
- Van Gend, David, [submission](#) to the Lockhart Committee, 2005 (see also [other](#) submissions).
- Wearne, Bruce, "The politics of embryonic stem-cell research," [Quadrant, Sep 2002](#), 18-20.
- Weiss, Rick, "The power to divide," [National Geographic](#), Jul 2005 [may require registration].
- Williamson, Bob, "[Striving for an ethical way forward for stem cell research in Australia](#)," Address to Annual Symposium on recent advances in stem cell science and therapies, Canberra, 6 May 2005.

## 5. Other online resources

- [The Lockhart Review](#). On 17 June 2005, the former Minister for Ageing, the Hon Julie Bishop MP, appointed a six-member committee to conduct independent reviews of Australia's *Prohibition of Human Cloning Act 2002* and the *Research Involving Human Embryos Act 2002*. The website contains a large amount of information including a [literature review](#) [731K pdf], the [Committee's view and recommendations](#) [258K pdf], and the [full report](#) [2.7MB pdf].
- [An assessment of the Lockhart Review](#). A critique of the Lockhart Review Report by Brian Edgar, Director of Public Theology, Australian Evangelical Alliance, published in June 2006. Argues that the Report errs in finding that the value of the human embryo is to be derived from the intention of the clinician, and includes a broad analysis of the parameters of the notion of the significance of a technological approach to human life.
- [Australians for Ethical Stem Cell Research](#). A helpful guide for those who oppose destructive stem cell research by Australian doctor David Van Gend of Do No Harm.
- Australian Christian Lobby, "[How to lobby against human cloning](#)."
- [Stem cells and human cloning](#). A collection of recently published online resources from the Australian Academy of Science.
- [Stem Cells: Scientific Progress and Future Research Directions](#). A large report published by the US National Institutes of Health in 2001 [20MB pdf]
- [Regenerative Medicine 2006](#). A large report written by experts in stem cell research and published by the US National Institutes of Health in 2006 [3MB pdf]
- [FAQ](#). A resource from the US Stem Cell Research Foundation answering common questions.
- [Research on stem cells](#). A short paper by C. Ward Kischer, professor emeritus of anatomy (specialty in Human Embryology) at the University of Arizona, published by the American

Bioethics Advisory Commission. Suggests that the term “stem cell” was coined by histologists, and that virtually every tissue in the human body contains stem cells. Includes five brief concluding remarks, reflecting a cautious and conservative approach. Recommends that research be conducted using stem cells from animals and adult tissue.

- [Cloning, stem cell research and some historical parallels](#). A paper by C. Ward Kischer, professor emeritus of anatomy (specialty in Human Embryology) at the University of Arizona, published by the American Bioethics Advisory Commission.
- [Key Ethical Issues in Embryonic Stem Cell Research](#). A report published by the Parliamentary Library, Commonwealth of Australia, 2002.
- [Ethics of stem cell research](#). A briefing paper from Biotechnology Australia.
- [Research ethics and stem cells](#). A resource from the US National Institutes of Health.
- [On Human Cloning](#). The 1999 Position Statement of the Australian Academy of Science. This remains the official position of the AAS, and includes discussion of stem cells; distinguishes between *reproductive cloning* to produce a human fetus and *therapeutic cloning* to produce human stem cells, tissues and organs.
- W. Jerome Bracken, [Is the early embryo a person?](#) Argues that there are reliable biological and metaphysical reasons for the claim that the zygote is a human person.
- [The inhuman use of human beings](#). A statement on embryo research by the Ramsay Colloquium, a group of Jewish and Christian theologians, philosophers and scholars, published in *First Things* 49, Jan 1995, 17-21. Argues that the embryo is a human person, and that “The production of human beings for the purpose of experiments that will destroy them should be prohibited by law. The use of human beings for experiments that will do them harm and to which they have not given their consent should be prohibited by law.”
- [Bioethics: Obstacle or Opportunity for the Gospel?](#) Lausanne Occasional Paper No. 58, Lausanne Committee for World Evangelization, October 2004. Examines central themes which provide a theological framework for Christian bioethics, and bioethical decision-making in the context of Christian ministry, using eight stories.

**Note:** This guide is best used in electronic form with access to the internet. If you are reading the print version, email [ethics@morling.edu.au](mailto:ethics@morling.edu.au) and request Occasional Paper 09 to be sent to you by email. Links may become obsolete. The Centre for Christian Ethics accepts no responsibility for the accuracy or other features of documents or links referred to in this guide.