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Australia			X		X		<p>The National Health and Medical Research Council (NHMRC) has released revised <a href="#">Ethical guidelines on the use of assisted reproductive technology in clinical practice and research</a> (ART guidelines). The revised ART guidelines provide ethical advice in areas such as: human egg donation; research on embryos that are unsuitable for implantation; research on embryos created by somatic cell nuclear transfer; and 'proper consent' in relation to the donation of human eggs and embryos.</p> <p>The guidelines also provide ethical advice for the clinical practice of ART, including: guidelines for the use of donated embryos; storage of gametes and embryos; information giving, counseling and consent; and innovations, training and quality assurance.</p>	<p>In late 2006 the Australian parliament voted to amend the legislation surrounding hESC regulation to allow SCNT and the derivation of hESC lines from embryos deemed unsuitable for implantation through PGD.</p> <p>The amended act, the "Prohibition of Human Cloning for Reproduction and the Regulation of Human Embryo Research Amendment Bill 2006" came into force in June 2007 and can be found on the NHMRC Website at: <a href="http://www.nhmrc.gov.au/publications/synopses/files/prohibit.pdf">http://www.nhmrc.gov.au/publications/synopses/files/prohibit.pdf</a></p>	<p>Australian Stem Cell Centre <a href="http://www.stemcellcentre.edu.au">www.stemcellcentre.edu.au</a></p> <p>Australasian Society for Stem Cell Research <a href="http://www.asscr.org">www.asscr.org</a></p> <p>New South Wales Stem Cell Network <a href="http://www.diabetes.unsw.edu.au/STEM/">http://www.diabetes.unsw.edu.au/STEM/</a></p>
Austria	X			X				<p>HESC research is not allowed, it is covered by the legislation applying to reproductive medicine: <a href="http://www.ris.bka.gv.at/bundesrecht">www.ris.bka.gv.at/bundesrecht</a></p> <p>Austria voted against HESC research during the European Council decision for FP7 .</p>	
Belgium			X		X			<p>Belgium – <i>Law on research on human embryos in vitro</i>, (April 2003).</p>	
Brazil			X	X				<p>In March 2005, the Congress voted to permit research using embryos left over from in-vitro fertilization that had been frozen for at least three years. It upheld a ban on cloning embryos. In May 2008 six of Brazil's Supreme Court's 11 justices upheld a 2005 law allowing embryonic stem cell research and turned down a petition filed that same year by then-Attorney General Claudio Fontelles, who argued the law was unconstitutional because it violates the right to life.</p>	
Bulgaria	X								
Canada			X	X				<p>Updated Guidelines for Human Pluripotent Stem Cell Research, June 28, 2006 <a href="http://www.cihr-irsc.gc.ca/e/31488.html">http://www.cihr-irsc.gc.ca/e/31488.html</a></p>	<p>Stem Cell Network Canada <a href="http://www.stemcellnetwork.ca">www.stemcellnetwork.ca</a></p>

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China			X		X			Ministry of Science of Technology and Ministry of Health, "Guidelines for Research on Human Embryonic Stem Cells," January 2004. <a href="#">Authorized translation</a>	
Cyprus				X		X			
Czech Rep			X					<a href="http://www.msmt.cz/Files/PDF/JJHumanstemcells.pdf">http://www.msmt.cz/Files/PDF/JJHumanstemcells.pdf</a>	
Denmark			X	X					Danish Stem Cell Research Center <a href="http://www.dasc.dk/">http://www.dasc.dk/</a>  The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion. <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
Estonia			X	X					The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion. <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
Finland			X					Finland has no law neither prohibiting nor allowing SCNT.	The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion. <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
France			X	X			"Bioethics Law" (6 Aug 2004, amended Law No. 94-653 of July 29 1994, on Respect for the Human Body and Law No. 94-654 of July 29 1994, on the Donation and Use of Elements and Products of the Human Body, Medically Assisted Procreation, and Prenatal Diagnosis.)	The new <i>Bioethics Law</i> received final approval of the government on 6 Feb 2006. The new law allows for 5 year licences to be issued to import HESC lines, to create new HESC lines from excess IVF embryos and to develop research programs. The law prohibits the creation of embryos for research including SCNT. <a href="http://www.agence-biomedecine.fr">www.agence-biomedecine.fr</a>	

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Germany	X	X		X				Research using hESC is permitted under criteria established by the German Stem Cell Act of 2002 which was amended in 2008. Under these guidelines, only stem cell lines created before 1st May 2007 may be used in research.	Stem Cell Network North Rhine Westphalia <a href="http://www.stammzellen.nrw.de">www.stammzellen.nrw.de</a> Network in Regenerative Medicine <a href="http://www.cellnet.org">www.cellnet.org</a> <a href="http://www.rmig.org">www.rmig.org</a> The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion. <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
Greece			X	X					
Georgia				X					
Hungary			X	X					
Iceland				X					Icelandic Stem Cell Research Centre <a href="http://www.stemcell.no/index.htm">http://www.stemcell.no/index.htm</a> The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion. <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
India			X		X		There should be no commodification of human oocyte, human sperm or human embryo by way of payment or services, except for reimbursement of reasonable expenses incurred by the person (amount to be decided by IC-SCRT/ IEC. Similarly, no payments should be made for donation of somatic cells for use in SCNT except for reimbursement for attending the clinic.  For full details on Oocyte donation seen new guidelines at: <a href="http://www.icmr.nic.in/stem_cell/stem_cell_guidelines.pdf">http://www.icmr.nic.in/stem_cell/stem_cell_guidelines.pdf</a>	Indian Council of Medical Research (ICMR), newly released National Guidelines for Stem Cell Research and Therapy. <a href="http://www.icmr.nic.in/stem_cell/stem_cell_guidelines.pdf">http://www.icmr.nic.in/stem_cell/stem_cell_guidelines.pdf</a>	The Stem Cell Research Forum of India <a href="http://www.scrfi.org">www.scrfi.org</a>
Ireland	X			X					

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Israel			X		X		While SCNT for the derivation of cell lines is allowed, donation of oocytes is not permitted for research purposes, currently restricting this technology.  From 9 May 07 the Knesset (Israeli Parliament) has started the process of approving egg donation for various purposes including research. The legal procedure is comprises of three following votes, the first of which has been accomplished	<a href="#">"Law 5759-1999 - Prohibition of Genetic Intervention (Human Cloning and Genetic Manipulation of Reproductive Cells)" (1999, amended March 2004).</a>	The Israel Stem Cell Society <a href="http://www.weizmann.ac.il/ISCS/">http://www.weizmann.ac.il/ISCS/</a>  The Israeli Consortium Bereshith (Genesis) for Cell Therapy
Italy	X	X		X					
Japan			X					An English translation of the amended guidelines on hESC research is not yet available. The original guidelines are at: <a href="http://www.mext.go.jp/a_menu/shinkou/seimei/2001/es/020101.pdf">http://www.mext.go.jp/a_menu/shinkou/seimei/2001/es/020101.pdf</a>	RIKEN Centre for Developmental Biology  <a href="http://www.cdb.riken.jp/en/index.html">http://www.cdb.riken.jp/en/index.html</a>
Lithuania	X			X					The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion.  <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
Luxembourg						X			
Latvia				X					The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion.  <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
Malta						X			
Mexico			X		X			Mexico reversed a previous ban on stem cell research in June 2004, creating the National Institute of Genomic Research ( <a href="http://www.inmegen.org.mx">www.inmegen.org.mx</a> ) and permitting research on supernumerary embryos and allowing SCNT.	
Netherlands			X	X					
Norway				X		X			<b>Norwegian Center for Stem Cell Research</b> <a href="http://www.stemcell.no/ncs.htm">http://www.stemcell.no/ncs.htm</a>  The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion.  <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>

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Poland						X			The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion. <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
Portugal				X		X			
Russia			X		X				The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion. <a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a>
Singapore			X		X		The Prohibition of Cloning and Other Prohibited Practices Act contains the following clause: <u>Prohibition of commercial trading in egg, sperm and embryo</u> This prevents the giving of valuable consideration such as money or gifts in exchange for a supply of egg, sperm or embryo, but does not refer to the reasonable reimbursement of expenses incurred or services provided in the collection, storage or transport of the tissue.	<a href="#">Human Cloning and Other Prohibited Practices Act</a> came into effect on 1 October 2004	Singapore Stem Cell Consortium <a href="http://www.sccc.a-star.edu.sg/">http://www.sccc.a-star.edu.sg/</a>
South Africa			X		X			South Africa passed the National Health Bill ( <a href="http://www.doh.gov.za/docs/bills/b32b.pdf">http://www.doh.gov.za/docs/bills/b32b.pdf</a> ) in late 2003 permitting HESC research on supernumerary embryos and embryos created specifically for stem cell research. SCNT is permitted and reproductive cloning is banned.	
South Korea			X		X			The Ministry of Science and Technology ( <a href="http://www.most.go.kr/">http://www.most.go.kr/</a> ) coordinates research, both private and public. The Bioethics and Biosafety Act implemented in January 2005 prohibits reproductive cloning and the creation of embryos for non-reproductive purposes, but allows the use of supernumerary IVF embryos for research purposes, and SCNT	
Spain			X		X			Spain's parliament passed a law to allow SCNT in June 2007. <b>Law 14/2007, of 3 July, on Biomedical Research [available only in Spanish]</b> <a href="http://noticias.juridicas.com/base_datos/Admin/l14-2007.html">http://noticias.juridicas.com/base_datos/Admin/l14-2007.html</a>  15 June 2007, MADRID - The lower house of the Spanish Parliament voted in favor of a bill on biomedical research that authorizes therapeutic cloning. The measure, which expressly prohibits reproductive cloning, was supported by all the parties in that chamber with the exception of the main opposition conservative Popular Party.	The Spanish Ministry of Health (MSC), together with the Autonomous Communities, approved the creation of three research centres (July 2004): Catalonia (CMRB), Andalusia (CABIMER), Valencia (Centro de Investigación Príncipe Felipe) <a href="http://www.cmrb.eu">www.cmrb.eu</a> <a href="http://www.choa.fib.es">http://www.choa.fib.es</a>

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Sweden			X		X		<p>This statute and the <i>in vitro</i> Fertilization law of 1988 govern embryo research. Any research, which seeks to genetically modify the embryo, is prohibited. The statute implicitly prohibits embryo and oocyte cloning with criminal sanction.</p> <p>In December 2001, the Swedish Research Council declared that creating embryos through somatic cell nuclear transfer for therapeutic purposes "can be ethically defensible" which would require formulation or a legal framework by the Swedish government.</p> <p><a href="http://www.vr.se/filesserver/index.asp?fil=LCK7HDEK3U6H">http://www.vr.se/filesserver/index.asp?fil=LCK7HDEK3U6H</a></p>		<p>The ScanBalt Stem Cell Research Network has been established with representatives from all the 11 countries in the ScanBalt BioRegion.</p> <p><a href="http://www.scanbalt.org/sw222.asp">http://www.scanbalt.org/sw222.asp</a></p>
Switzerland			X	X					<p>Swiss Stem Cell Networks</p> <p><a href="http://www.unige.ch/sciences/biologie/biani/sscn/">http://www.unige.ch/sciences/biologie/biani/sscn/</a></p>
Slovenia			X	X					
Slovakia				X		X			
Taiwan			X	X				<p>Department of Health, "Ethical Regulations for Embryonic Stem Cell Research," 2002. – New legislation pending.</p>	<p>Taiwan Society for Stem Cell Research</p> <p><a href="http://www.tsscr.org.tw/">http://www.tsscr.org.tw/</a></p>
Thailand						X		<p>Medical Council of Thailand, "Regulations on Human Cloning No. 21/2544," June 2002. The regulations ban human reproductive cloning.</p>	
United Kingdom			X		X		<p>In Feb 2007 HFEA changed the regulations so that women are now allowed to donate eggs for research. Compensation is set at £250</p> <p>Source: <a href="http://www.hfea.gov.uk">www.hfea.gov.uk</a></p>	<p>The Human Fertilisation and Embryology Authority (<a href="http://www.hfea.gov.uk">http://www.hfea.gov.uk</a>) is responsible for the implementation of the HFE Act.</p> <p>"Human Reproductive Cloning Act 2001," UK Stat. 2001 c23 &amp;1, (in force 4 December 2001).</p> <p><a href="http://www.legislation.hmso.gov.uk/acts/acts2001/20010023.htm">http://www.legislation.hmso.gov.uk/acts/acts2001/20010023.htm</a></p> <p>The current HFE Amendment Bill is being debated by the UK Parliament.</p> <p>At 18 Sep 08 it had passed the second reading, bill tracker: <a href="http://services.parliament.uk/bills/2007-08/humanfertilisationandembryology.html">http://services.parliament.uk/bills/2007-08/humanfertilisationandembryology.html</a></p>	<p>UK National Stem Cell Network <a href="http://www.uknscn.org">www.uknscn.org</a></p> <p>Scottish Stem Cell Network <a href="http://www.sscn.co.uk">www.sscn.co.uk</a></p> <p>North East England Stem Cell Institute <a href="http://www.nesci.ac.uk">www.nesci.ac.uk</a></p> <p>East of England Stem Cell Network <a href="http://www.eescn.org.uk">www.eescn.org.uk</a></p> <p>London Regenerative Medicine Network <a href="http://www.regenmednetwork.com">www.regenmednetwork.com</a></p>

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USA						X	<p>The US has no federal legislation regarding human cloning and stem cell research. The only existing federal policy in this area is the Presidential ban on the use of federal funds for research on, or the creation of, new stem cell lines subsequent to his announcement of the ban on 9 Aug 2001. For full details see the NIH website at: <a href="http://stemcells.nih.gov/research/registry/eligibilityCriteria.asp">http://stemcells.nih.gov/research/registry/eligibilityCriteria.asp</a></p> <p>Within the individual US States there is a huge variation of laws between the states. From California which has permissive laws for HESC research to states with an outright ban on HESC research to other states with no laws at all. See the National Conference of State Legislators for more information: <a href="http://www.ncsl.org/programs/health/Genetics/rt-shcl.htm">http://www.ncsl.org/programs/health/Genetics/rt-shcl.htm</a></p> <p>The Stem Cell Blog has produced a useful guide to state legislation called <i>What Color is Your State?</i> It can be found at <a href="http://thestemcellblog.com">http://thestemcellblog.com</a></p> <p>The US has the most developed and least regulated internal market for oocytes. Trading of oocytes for reproductive purposes common practice. For example, in 2002 11.4% of or ART procedures used oocytes purchased for fees of around \$5000 per cycle. Moreover premiums are paid to vendors with additional desirable characteristics of sums up to \$100,000 per cycle.</p> <p>Whilst the US has a large number of stem cell companies and privately funded stem cell research, as the states step in to fund research not funded federally many are imposing restrictions on paying for oocytes for stem cell research. For example, California which has committed \$3 billion to stem cell research through Proposition 71 prohibits the paying for oocytes for research funded by the state.</p>	<p><b>Interstate Alliance on Stem Cell Research (IASCR)</b> is a voluntary body whose mission is to advance stem cell research (human embryonic, adult, and other) by fostering effective interstate collaboration.</p> <p><a href="http://www.iascr.org/">http://www.iascr.org/</a></p> <p>California Institute for Regenerative Medicine</p> <p><a href="http://www.cirm.ca.gov">www.cirm.ca.gov</a></p> <p>New York Stem Cell Foundation</p> <p><a href="http://www.nyscf.org">www.nyscf.org</a></p> <p>Harvard Stem Cell Institute</p> <p><a href="http://www.hsci.harvard.edu/">http://www.hsci.harvard.edu/</a></p>	



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- Sources:
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  - Isasi, R and Knoppers, B (2006). 'Mind the Gap: Policy Approaches to Embryonic Stem Cell and Cloning Research in 50 Countries', *European Journal of Health Law*, Vol 13, 9-26.
  - ISSCR International Legislation on Human Embryonic Stem Cell Research, at: <http://www.isscr.org/public/regions/index.cfm>
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  - The European Group on Ethics in Science and New Technologies to the European Commission, *Recommendations on the ethical review of hESC FP7 research projects, Opinion No 22*, at: [http://ec.europa.eu/european\\_group\\_ethics/activities/docs/opinion\\_22\\_final\\_follow\\_up\\_en.pdf](http://ec.europa.eu/european_group_ethics/activities/docs/opinion_22_final_follow_up_en.pdf)