

Background Briefing on Stem Cell Research for Second Reading of the Human Fertilisation and Embryology Bill

Charities and stem cell research

- AMRC, GIG, and the 245 member charities that we jointly represent, have long-been at the forefront of the debate about the need for, and potential therapeutic benefits of, stem cell research. Some of the provisions within this Bill would enable this research to progress, with the use of early stage human embryos (up to 14 days) as a source of stem cells for research.
- Approximately 20 of AMRC's member charities fund some form of stem cell research with a total expenditure of over £10 million since 2003. This figure does not include expenditure by the Wellcome Trust – AMRC's largest member charity – which funded £40 million of stem cell research between 2002 and 2006.

The Public

- A 2003 MORI poll¹ showed that around 70% of the British public support the use of human embryos for medical research to find treatments for serious diseases and for fertility research. We welcomed the Science Minister's announcement in March 2007 of a national discussion with the public on stem cell research. Indeed, a further public consultation exercise by the HFEA² in 2007 showed that 79% of people support the use of human embryos for medical research to find treatments for serious diseases and for fertility research.
- AMRC and GIG are pursuing a number of public engagement activities to encourage debate on the issues raised by stem cell research including, in collaboration with the MRC, Department of Health and Y-Touring Theatre Company, the production of a play and extensive accompanying educational material for teenagers entitled 'Nobody Lives Forever.'

The Science

- Human-admixed embryos are a vital tool to advance the progress of research into the potential of embryonic stem cells. The use of an animal egg as an empty vessel for the creation of human embryos overcomes the limiting factor of the availability of donated human eggs. Less than 0.1% of the genetic material in the resulting embryo is animal, and work is being done to further reduce this figure. The law would not allow implantation of such an embryo in a woman, nor would researchers wish to do this, and the embryos would only be allowed to develop, as a source of stem cells, for up to 14 days.

The Science continued...

- Embryonic stem cells offer a potentially vital avenue for research which could greatly increase our understanding of serious medical conditions such as Parkinson's, motor neurone disease, Alzheimer's disease and cystic fibrosis. This research may ultimately lead to new treatments and cures. There is no current intention of using the resulting stem cells directly for treatment. Somatic Cell Nuclear Transfer (the process in which empty egg cells, human or animal, are used to create an embryo) allows the study of embryonic stem cells that have a particular genetic condition, leading to a better understanding of the causes of the condition.
- In an unprecedented move in April 2007, 223 medical research charities and patient organisations – all members of either AMRC or the Genetic Interest Group – sent an open letter to the Prime Minister urging the Government to sanction human-admixed embryo research. A copy of this letter and a list of the signatories can be found on our websites (www.amrc.org.uk & gig.org.uk).
- AMRC, GIG, and their member charities are committed to ensuring that well-regulated, carefully planned and high-quality work for patient benefit is encouraged, in a climate of public understanding and running alongside a background of ongoing public engagement.

The Association of Medical Research Charities (AMRC) is a membership organisation of the leading medical and health research charities in the UK. Our 115 member charities contribute almost £800 million annually to research aimed at tackling diseases such as heart disease, cancer and diabetes, as well as rarer conditions like cystic fibrosis and motor neurone disease.

www.amrc.org.uk

Genetic Interest Group (GIG) is an umbrella group working to benefit our membership of over 130 patient support groups caring for patients and families affected by inherited conditions. The majority of these conditions are currently without cures or treatments. GIG works to ensure a permissive regulatory framework that will foster progress in research towards a better understanding and eventually a treatment for these conditions.

www.gig.org.uk

1. <http://www.ipsos-mori.com/polls/2003/amrc.shtml>
2. <http://www.hfea.gov.uk/en/488.html>