



Speech by

## Hon. Stephen Robertson

MEMBER FOR STRETTON

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### RESEARCH INVOLVING HUMAN EMBRYOS AND PROHIBITION OF HUMAN CLONING AMENDMENT BILL

**Hon. S ROBERTSON** (Stretton—ALP) (Minister for Health) (8.24 pm), in reply: I thank all members who have spoken in this debate. The contributions show that there is a wide range of views in the House and certainly a very good understanding of what is a complex and difficult issue for us to get our heads around. It also raises important moral and ethical questions which is why government and opposition members are voting according to their conscience. I recognise the support of the Premier, the opposition leader and the opposition health spokesperson for the bill.

It amends the Research Involving Human Embryos and Prohibition of Human Cloning Act 2003 to mirror recent amendments to the Commonwealth Research Involving Human Embryos Act 2002 and Prohibition of Human Cloning Act for Reproduction Act 2002. The bill gives effect to the undertaking made by all the states and the Australian Capital Territory at the Council of Australian Governments meeting on 13 April 2007 to introduce corresponding legislation into their respective parliaments to maintain a national approach to regulating human embryo research and cloning.

The amendments will allow, under licence, the creation of embryos for research purposes by means other than fertilisation of a human egg by human sperm. The National Health and Medical Research Council's Embryo Research Licensing Committee will be able to issue a licence for the creation of an embryo using techniques such as somatic cell nuclear transfer for approved research. By allowing this kind of research within a strict regulatory and ethical framework we will develop a better understanding of disease with the potential to ultimately develop life-saving treatments.

Some members have expressed concern that parliament is now considering matters that we first dealt with only four years ago. However, when we passed the Research Involving Human Embryos and Prohibition of Human Cloning Act 2003 it was always intended to be subject to an independent review. In fact, it was required under section 49 of the act. This requirement recognises the government's responsibility to continue to evaluate and respond to this emerging field as indeed it does with many others.

The amendments before the House have arisen from the recommendations of that independent review chaired by the late Hon. John Lockhart. Members have discussed at length the advances made in relation to adult stem cell research. Recent research suggests that adult stem cells may have the capacity to differentiate into more cell types than previously suspected. These results are very exciting; however, they do not negate the potential benefits of pursuing embryonic stem cell research.

In general, embryonic stem cells are believed to be more versatile than adult stem cells as they are capable of generating any cell of the body. Although the bill supports embryonic stem cell research, it will not affect adult stem cell research. Many scientists are of the view that both avenues of medical research should be pursued within a strict ethical framework. That is why the Commonwealth government has committed \$22 million for an adult stem cell research centre, including \$2 million for Griffith University. The state government also contributed \$12 million to Griffith University to build the Eskitis Institute for Cell and Molecular Therapies. The institute is home to the National Centre for Stem Cell Research which focuses

on adult stem cell research. The state government has also given \$1 million to the Institute for Molecular Bioscience at the University of Queensland for research into adult stem cell treatment for renal diseases.

A number of members also made reference to research undertaken by Shinya Yamanaka in Japan. Mr Yamanaka's team say they have been able to manipulate the skin cells of mice to return to an embryonic state. Although welcome, this news should not be oversimplified and is not reason to abandon embryonic stem cell research. In fact, one of the aims of embryonic research is to find a way to encourage adult stem cells to revert back to an embryonic state, thus overcoming the need to use embryos for research. It is unknown whether the Japanese research will be able to be replicated in human cells and harnessed for human therapies. It is also important to note that 20 per cent of the mice used in Yamanaka's experiment died from cancer.

That brings me to recent advances in embryonic stem cell research. Some members, such as the member for Moggill and the member for Southern Downs, raised concerns that embryo stem cell research has produced no benefits for medical research. These assertions are disputed. Embryo stem cell research is a new field of science but is one of the most rapidly advancing fields of research in the world.

Many members have told how this research is already yielding new benefits to medical science. A number of recent studies have reported promising therapeutic benefits when human embryonic stem cells are transplanted into animals infected with human diseases. Some recent advances include developing treatment for behavioural recovery in rats with Parkinson's disease, improving heart function in rats with heart disease, improvements in spinal cord injuries in rats, and the creation of pancreatic-like cells capable of short-term improvement in diabetic mice. These animal models give rise to the possibility that science may find a way to adapt these treatments to human conditions. Many Queenslanders are encouraged by these possibilities. For example, the Stroke Association of Queensland says—

After canvassing the 11 members of the Stroke Association of Queensland Board of Management, our unanimous opinion is that, provided suitable ethical guidelines are put in place, we are in favour of allowing this research in Queensland.

Although there is no guarantee that such research will produce results in medical breakthroughs for the alleviation of such conditions as stroke, Parkinson's and spina bifida, we are of the opinion that, if research is prohibited and scientists cannot investigate its possibilities, then the advancements in medical therapies will be unnecessarily inhibited.

I now turn to matters raised by a number of members concerning the sale, trade and importation of embryos in Queensland. The sale of eggs, sperm and embryos is prohibited under the current state and Commonwealth legislation. In fact, this bill increases the penalty for the sale of eggs, sperm and embryos from 10 years to a maximum 15 years jail. It also broadens the scope to include all embryos created by allowable scientific means. With respect to the possible importation of embryos for research, this too is banned under the federal legislation. The bill also strengthens consent provisions for the donation of eggs, sperm and embryos for research purposes. These provisions require compliance with the NHMRC guidelines to ensure that consent is fully informed, voluntary and free from coercion. Donors can also place restrictions on the use of the donated material. These consent requirements apply regardless of what country the eggs, sperm and embryo are sourced from.

Some members also raised the fact that no NHMRC licences have been yet issued in Queensland. However, just because there is no licence holder in Queensland at this point in time does not mean that we should preclude future possibilities arising in the state. Indeed, there have already been approved research related activities undertaken in Queensland under licences issued to organisations in other states. Further, the Queensland act only applies to a small number of researchers which may raise a disparity where larger companies have licences issued under the Commonwealth act. It is of course important to note that, of the nine licences issued under the original legislation, there have been no offences or prosecutions for inappropriate research or breach of the act. This demonstrates that the licensing system works and scientists in this field are prepared to adhere to the strict ethical and regulatory requirements in the current act. In closing, I once again thank all members for their contributions to the debate. I hope that the passing of this bill will lead to great breakthroughs in medical science and deliver, in time, a longer and better quality of life for all Queenslanders. I commend the bill to the House.