

# Why we all need stem cell research

*Parliament should support the recommendations of the Lockhart review, writes Anna Lavelle*

**W**HEN former Federal Court judge John Lockhart and his committee recommended that the federal legislation covering stem cell research be extended to include somatic cell nuclear transfer, many believed our scientists would join those in Sweden, South Korea, Israel and Britain in being able to develop disease models and identify treatments for disorders such as motor neurone disease, Parkinson's disease and diabetes.

Sadly, this is not so. Even though somatic cell nuclear transfer has the support of most state and territory governments and is likely to get the support of the Council of Australian Governments, there is a risk that members of the federal parliament will ignore the independent recommendations and reject the necessary legislative amendments.

Rather than the Lockhart recommendations pushing Australian stem cell research forward, we are likely to face a rerun of the fiery and often hostile debate that saw the passing of original legislation in 2002.

This should not happen. Why not? Because the federal and state governments set up and supported an independent committee to look at all the available evidence and make recommendations based on that extensive examination.

This process was designed to transcend the often polarised and partisan debate that has surrounded embryo and stem cell research and to provide a way forward that would take into account and balance ethical, cultural and scientific imperatives.

After more than six months of considering more than 800 written submissions and hundreds of face-to-face consultations, the independent Lockhart review committee has made its recommendations.

They are not radical recommendations. In fact, they generally bring Australia into line with Britain, where this research has been regulated successfully since 2001.

Somatic cell nuclear transfer involves taking the nucleus of a cell from a patient, transferring it into an egg from which the nucleus has been removed, growing the resultant embryo in the laboratory for about five days, then extracting the embryonic stem cells, which are exact copies of the patient's DNA.

It is important to note that the process does not involve the use of sperm, so the embryos in question are not fertilised, unlike excess in-vitro fertilisation embryos that are used to derive embryonic stem cell lines. The egg in this sense is used purely as an incubator for copying the patient's own cells.

The other important difference between somatic cell nuclear transfer and IVF embryos is that there is no intention with the former to implant them or allow them to develop into a human being. As the Lockhart review recommendations make clear, such embryos should not be allowed to develop past 14 days and should never be implanted into a woman.

While I suspect the next round in the battle to allow somatic cell nuclear transfer in Australia is beginning, I applaud Lockhart and his committee for having the courage to consider all the evidence and to conclude that the technology will benefit Australians.

I also think it is important that their report be read in its entirety because only in that way will people appreciate the rationale that underpins the committee's proposed comprehensive framework for embryo research in Australia. It does the work of this group, and all those who contributed to it, a disservice just to focus on the more contentious recommendations and to do so out of context.

As an industry association that represents individuals and companies across the full spectrum of biotechnology research and commercialisation, we are pleased to see that the committee has responded to the moral and scientific challenges put before it by proposing a legislative and regulatory framework that is tight enough to address the rigorous ethical standards expected by the Australian community, but is also flexible enough to respond to a rapidly changing research area.

And, as an industry association, we would say now to all political parties and all members of parliament, support the independent process that was put in place to review the Prohibition of Human Cloning Act 2002 and the Research Involving Human Embryos Act 2002.

The arguments that were waged furiously three years ago could continue for years to come; no one will gain and a lot of people stand to lose. After considerable research, consultation and reflection, the independent umpire has laid out his decision. It is time to accept it and move on.

Anna Lavelle is chief executive of AusBiotech, Australia's biotechnology industry organisation, which represents 2500 members, covering the human health, agricultural, medical device, environmental and industrial sectors in biotechnology.