

## Legislative Council

Tuesday, 24 March 2009, Page 1613

### STATUTES AMENDMENT (PROHIBITION OF HUMAN CLONING FOR REPRODUCTION AND REGULATION OF RESEARCH INVOLVING HUMAN EMBRYOS) BILL

**The Hon. A. BRESSINGTON** (17:10): I rise to indicate that I will not be supporting this bill, and I will not rehash the arguments of the Hons Dennis Hood, Bernie Finnigan and Rob Lucas. There is a great deal of concern as to the necessity for this kind of research to be going ahead. Dare I be brave enough to say that stem cell research itself has produced few outcomes for the amount of kerfuffle that has been raised in the public and scientific arenas of the need for this kind of research. I note that very recently President Barack Obama in the United States lifted the ban on embryonic stem cell research but said at the time that he would not condone human cloning for embryonic stem cell research because it was found to be repugnant to the American people and, also, to him. I hope he has the tenacity over time to stand by that statement.

I heard the Hon. Mr Ridgway talking about family members who have died because of cancer and illness. Indeed, it is a sad thing that children, especially, contract serious illness. The point to be made here is that none of those particular illnesses or cancers could have been assisted at all with embryonic stem cells. In fact, as the Hon. Rob Lucas said, adult stem cell research has gone ahead in leaps and bounds. In fact, 73 illnesses and disorders can be treated with adult stem cells. The score for adult stem cells versus embryonic stem cells is adult stem cells 73, embryonic stem cells zero.

I will painstakingly read out the disorders and illnesses that can be treated by adult stem cells because it is important that each one is on the public record as being able to be cured with treatment by adult stem cells. A lot of these illnesses and disorders are used in the embryonic stem cell debate to stir up emotion. In fact, we can already apply medicine and science to them. All these disorders and diseases can be treated with adult stem cells: brain cancer, retinoblastoma, ovarian cancer, skin cancer (merkel cell carcinoma), testicular cancer, tumours abdominal organs lymphoma, non-Hodgkin's lymphoma, Hodgkin's lymphoma, acute lymphoblastic leukaemia, chronic myelogenous leukaemia, juvenile myelomonocytic leukaemia, chronic myelomonocytic leukaemia, cancer of the lymph nodes, multiple myeloma, breast cancer, neuroblastoma, renal cell carcinoma, various solid tumours, soft tissue sarcoma, Ewing's sarcoma, diabetes type 1, systemic lupus, Crohn's disease, juvenile arthritis, multiple sclerosis, acute heart damage, chronic coronary artery disease, corneal degeneration, severe combined immunodeficiency syndrome, Parkinson's disease, spinal cord injury, stroke damage, sickle cell anaemia, sideroblastic anaemia, aplastic anaemia and red cell aplasia. By the way, I am reading out only those that I can pronounce. There is also chronic Epstein-Barr infection, limb gangrene, surface wound healing, jawbone replacement, skull bone repair, Hurler's Syndrome, osteogenesis imperfecta, chronic liver failure, liver cirrhosis, end stage bladder disease—and there are another 60-odd that I have not read out.

I think that those 73 diseases and illnesses cited, which can be treated with the medical application of adult stem cells, should be a pretty clear indication that this is the way we need to go with the research and the science. The whole use of embryonic stem cells, this move to human cloning, is quite a concern to many people who are aware that this sort of debate is occurring, and I am sure people are even more shattered now, as I am, to find out that this is just an academic exercise and that federal legislation will, in fact, override whatever we do here. That is most disappointing. I think Theodore Roosevelt said it best, when he said: 'To educate a man in mind and not morals is to educate a menace to society.'

I think we can only put so much trust in the scientific profession. As the Hon. Mr Finnigan said, most people abide by the rules, most people do have respect and see that there is a need for clear boundaries, but there is always that radical few who will want to push the envelope. As the Hon. Rob Lawson stated, only 5½ years ago this place was debating one level of this kind of legislation and research and here we are again, taking it to that next level. That is indeed the beginning of the slippery slope that we would all prefer to believe does not exist—but there are plenty of examples that it does.

I would also draw to the attention of honourable members that in November last year *60 Minutes* did a report on stem cell research which showed that we are now able to grow hearts with a scaffold from a cadaver (or not even from a cadaver) that has been treated, cleaned and brushed with stem cells—and not embryonic stem cells. A fully functioning heart can now be grown and transplanted, and they did that with a rat.

On the *60 Minutes* program I watched they were able to transplant the heart, which had been grown in a test tube, and the rat survived with no signs of rejection and no need for any anti-viral medications to prevent rejection, because it was the rat's stem cells that were used to grow the heart over a scaffold. Ellen Fanning did the story, which was quite fascinating, and she said:

*I've just had the most amazing experience. A glimpse of the future. I've seen a living, beating heart built from scratch in a laboratory. It's a major breakthrough. A vital step towards custom-made human body parts for transplants. Now say you had a serious heart or kidney disease. There would be no more waiting months, maybe years for a donor. Your doctor would simply order a new organ designed especially for you. Imagine what that would mean to thousands of Australians now on the list for organ transplants. As you will see, this isn't some scientist's crazy dream—it's already happening.*

In fact it's happening at the University of Minnesota, where they not only grew a heart in a jar but where they also helped a young girl who was born with spina bifida whose bladder had never fully developed. They grew her a new bladder. Prior to this process, although she was studying at university she had to do all that from home. She could rarely leave there because she had no bladder and, as you can imagine, it was just too embarrassing for her. They grew her this bladder, it was transplanted, and she now attends the university campus. She can go anywhere and has a whole new life ahead of her. I stress that this was not because of embryonic stem cell research; it was adult stem cells that assisted in this.

I would also like to read from a paper that I had hoped members would be able to access before they made their decision on the bill, because it is a monitor of stem cell research. In a paper by Dr David A. Prentice PhD, a professor in the department of life sciences at Indiana State University, he states:

*Within just a few years, the possibility that the human body contains cells that can repair and regenerate damaged and diseased tissue has gone from an unlikely proposition to a virtual certainty. Adult stem cells have been isolated from numerous adult tissues, umbilical cord, and other non-embryonic sources, and have demonstrated a surprising ability for transformation into other tissue and cell types and for repair of damaged tissues.*

*Adult stem cells have received intense scrutiny over the past few years due to surprising discoveries regarding heretofore unknown abilities to form multiple cell and tissue types, as well as the discovery of such cells in an increasing number of tissues. The term 'adult stem cell' is somewhat of a misnomer, because the cells are present even in infants and similar cells exist in umbilical cord and placenta.*

So we have had the information about this skin technology and the ability to extract stem cells and grow organisms and so forth. This adult stem cell technology, according to the Hon. Rob Lucas, was raised in the federal debate by the Hon. Christopher Pyne. This is an old technology; it is not new technology. This science, this information, has not just dropped out of the blue; it has been around and it has been basically buried in all the hype around embryonic stem cell research and human cloning.

I am going to be very brief with this because everybody has basically said everything that there is to say on it. However, I do have one concern and that relates to a comment made by the Hon. Ian Hunter. I believe he said that this bill would now perhaps make it easier for the process of parthenogenesis to be explored and used in the application of IVF, and that, to me, is a huge concern—parthenogenesis being an asexual way of reproducing and not being specific to mammals or humans.

There has already been quite a bit of experimentation, if you like, with this process and, as we know, that slippery slope may not be as far away as we think. In 2007, I think, there was research into this, and we have now seen that a mouse developed from a parthenogenic process has been born and has created viable offspring.

This sort of science, although it seems like sci-fi, is not that far away, and I think that comment of the Hon. Ian Hunter brought up for me a number of concerns as to where we would be in perhaps 10 or 20 years and how many more allowances we would be prepared to make all in the name of science.

Really, we are asking ourselves: is this necessary? In my opinion and in science's opinion, adult stem cell research has a lot more to offer and, therefore, I think it would be wise of us to tread very carefully with the processes to which we may be opening the door.

As I have said, other members have raised all the information and research that shows that this is a bill that is outdated and has been already surpassed by science, by medicine and by treatment and the application of stem cell technology from adult stem cells. I think that this is a bit of an indulgence for us to be considering human cloning at this stage of medical and scientific research.