

Dear Mr Humphery

I wish to clarify for the committee one aspect of my evidence given in my submission and at the hearing last Monday in Sydney. There was an apparent discrepancy in my evidence between my assertion in the submission that the fertilised egg and the cloned embryo are "identical", and another assertion that they are "near identical", and an answer I gave at the hearing that they are "different". I submit:

- 1) They are different in the way they are produced, one by union of egg and sperm, the other by SCNT or cloning. The latter is what is repugnant to many, because it produces a clone of the parent. A clone for reproduction or fetus-farming is identical to one produced for destructive embryonic research.
- 2) The fertilised egg and the cloned embryo are near identical in that both have egg cell membrane and cytoplasm together with a nucleus which has a complete human nuclear genome, but the cloned embryo has mitochondrial genes which are foreign to the nucleus (it is this latter point which makes them structurally not quite identical).
- 3) The fertilised egg and the cloned embryo are identical in as much as the complete genome defines them as embryos which are self-determining and which begin dividing with the potential to produce mature human beings. This has been realised in sheep; we hope that it is never realised in humans. Embryos are defined by this potential, not by where exactly they are.

Thanking you
Yours sincerely

Barry Wilkins
23A Forum Crescent, Baulkham Hills, NSW 2153

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