

TESTIMONY REGARDING SB 74 (Hines)

(to provide for a ban on *reproductive* human cloning)

HOUSE HEALTH & WELFARE COMMITTEE

June 2, 2004

Madam Chairman, Honorable Committee Members:

My name is Dr. W. A. Krotoski; I am an internist and medical scientist, now retired, with credentials including the M.D., Ph.D. and Master of Public Health degrees. I have published 54 scientific papers, taught in schools of medicine and public health (including both LSU and Tulane University), have co-authored a medical textbook, and contributed to others. In 1989, my medical research work was honored in being nominated for the Nobel Prize by Professor P.C.C. Garnham of Imperial College, London. I am a former President of the Louisiana Right to Life Federation, and currently its Medical Advisor. More recently, I helped found *The Hippocratic Resource*, an organization of, currently, 84 life-respecting physicians, dentists, medical scientists, nurses, etc., representing over 90 advanced (professional) degrees.

I would like to address this illustrious Committee on Senator Hines' bill, SB 74, which would ostensibly provide a ban on human cloning in Louisiana, but, actually, only for duplication/reproduction, *not* for destructive research. Unless this bill is amended to also ban human cloning for research, including *embryonic* stem cell research, we must oppose it, for the following reasons:

Medically and biologically speaking, a human embryo is human, whether produced as a clone or by normal fertilization, based not only on his or her human origins and unique DNA (even when cloned) – but also by analogy with what was done to produce Dolly, the sheep clone, and clones of several other animal species. Simply put, had Dolly's clone embryo not been a sheep, Dolly would not have been a sheep. But, she was – even though a prematurely ageing one! A human clone embryo, due to those human origins and anticipated ability to grow into an adult, deserves the dignity afforded any naturally conceived human being. This demands protection, not killing for experimentation. Killing a human clone embryo is killing a human being, just as would be the case for any other human being killed at the embryonic stage of development. Morally speaking, we are not empowered to kill each other arbitrarily, whether for research, or for any other reason. In fact, any research on human beings done without their full consent – as was the practice of Hitler's willing minions during the Nazi Holocaust – is both unethical and totally reprehensible. Simply put, therefore, since all human clones are human, *all* human cloning must be banned, not just that for reproduction. Furthermore, the ban must be endowed with sufficient teeth to prevent such wanton and arrogant tinkering with the natural human reproductive processes devised by our Creator, *including* – as have already been created in the laboratory – cross-species hybrid embryos, such as rabbit-human embryos!

Senator Hines' bill, which is represented as a cloning ban bill, would appear to limit human cloning to prevent production of a viable human baby, **but it does *nothing* to preclude the production of human clone embryos for destructive scientific research**, even though ostensibly to help people with chronic or genetic diseases. However, there have been zero (0) clinically useful discoveries from cloning experiments to date, and a few horrible disasters. In fact, there are theoretical reasons for considering embryonic cell lines to be less suitable for the types of clinical uses touted than are adult and placental stem cell lines – and this has even been acknowledged by the father of embryonic stem cell research, Dr. John Gearhart, himself. On the other hand, there have been a number of successes with adult and/or placental stem cell lines, including for juvenile diabetes, spinal cord injury, immune deficiency, corneal repair, and regeneration of human heart tissue, and this type of research should be pursued and supported. Senator Lentini's bill, SB 873 – which was passed in the Senate last week, by a vote of 29-8 – is identical to the original bill put forward by Representative Beard, HB 803, and would do just that.

As a physician, I have learned that promoting *false* promises or *false* hope is both deceitful

and cruel. My own brother has diabetes, and I have a lifelong friend who is now suffering from progressive Parkinson's disease. Nevertheless, as a medical scientist, I recognize well that success is built by following clues about reality, *not* about what one wishes reality to be. And as a human being who is daily exposed to hype in our broadcast media, I am fully aware that hype sells – but not necessarily what one wants to buy. (It is even sometimes used to attract research money)! In promoting *embryonic* stem cell research, a lot of hype has been used, but little substance - only theories. Simultaneously with the embryonic stem cell hype, those who are in favor of a comprehensive cloning ban have been characterized – frequently calumniated, in fact – as being against medical research, or of lying about the true facts of the matter. As mentioned above, in 1989 my own medical research credentials were acknowledged when my research work was nominated for the Nobel Prize. Additionally, I have served as medical research reviewer for, among others, the Bureau of Medical Services of the U.S. Public Health Service, and, on occasion, for the National Institutes of Health. I have also served as reviewer of medical articles for a number of medical journals, and, currently, am on the Institutional [Research] Review Board of one of our major Baton Rouge hospitals. With this background, I can attest that some of the simplest medical ethical issues have not been satisfied in regard to human cloning, not the least of which is a dearth of similar-disease research in lower species. First studying these theories in the normal progression of mouse, rat or guinea pig, then monkey and higher primates, before introduction into human medicine, has been the accepted, ethical road for introduction of new modalities into human medicine. In short, it would be *unethical* to proceed to human experimentation even on these most fundamental issues.

Finally, should Senator Hines' bill be adopted as presented, and without appropriate wording to make a ban on human cloning truly comprehensive, it can readily be anticipated that living human clone embryos will be produced, experimented on, and allowed to develop – even aberrantly – until killed. In contrast, the Lentini/Beard bill is carefully crafted, and will have the desired effect of a comprehensive human cloning ban – with teeth. Therefore, we ask that you vote *unfavorably* on SB 74 as it stands, and do not allow it to go forward to the full House. In this way, you will be furthering a very necessary, honest and well-founded respect for all human life, both born and unborn.

Thank you very much for your attention!

W. A. Krotoski, M.D., Ph.D., M.P.H.

Why a Human Clone Embryo is Fully Human:

Every human being normally begins his or her unique life at the moment of fertilization, when she or he acquires the full human complement of 46 (human) chromosomes, 23 from the father's sperm, and 23 from the mother's *ovum* ("egg"). This fact is fully supported both by *in vitro* fertilization technology and by advances in DNA identification techniques. Thereafter, the new human individual goes through a spectrum of stages, part of which are scientifically designated as embryonic or embryos, the later ones as fetuses and pre-born babies or prenatals. Similarly, after transfer of (adult) genetic material (the nucleus of an adult cell) to an ovum depleted of its own nucleus – as in the SCNT method – a cloned individual (e.g. Dolly the sheep) goes through an embryo stage developmentally entirely equivalent to that produced by normal fertilization. If in the womb, this clone embryo will continue to develop, just as did Dolly, and be born. Of course, if the clone embryo is of human origin, he or she – the sex is determined at fertilization or nuclear transfer – will also pass through all the usual stages in the womb, and, if not aberrant, will be born as a human baby, in perfect analogy to Dolly the sheep.