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COMMUNITY AFFAIRS COMMITTEE.

Legislative responses to recommendations of the Lockhart Review.

Prohibition of Human Cloning Act 2002 Research Involving Human Embryos Act 2002[Lockhart review]

LIFTING THE LID ON HUMAN CLONING.

A submission in response.

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SUMMARY COMMENT

In the 4 years since the Federal Government prohibited any extension to the ban on human cloning-by whatever name it might be defined- no new scientific advances in embryonic stem cell research has been provided. Rather, further fraud and smoke screens of deception have been exposed.

The Lockhart review has been shown to have exceeded its terms of reference by revisiting the ethical issue on whether it was right to create human embryos specifically for research. The review panel moreover, in balance, have expressed their own biased prejudice favouring human embryo experimentation. Even to recommending extension into human-animal hybrids and/or chimera. The latter feature has been requested in the draft bills independently offered by Senators Despoja and Patterson.

There has been a failure to address the exploitation of women in soliciting or creating incentives, for them to contribute the multiplied thousands of ova needed to create embryonic stem cells.

The issue of informed consent has been avoided.

Concerning proposals to expand research into animal-human hybrids (or Chimera) there is a failure to address the risks of viral transfer or animal chromosomes into the human species.

The lucrative financial gains likely to provide incentive to pursue disease toxicity and drug testing by way of stem cells derived from hybrids must be evaluated.

Overall, if we honestly examine the human clinical trials and research advances both in human and animal studies using adult stem cells we find an impressive record and almost none regarding embryonic stem cells.

We might well ask why does the controversy exist.?

Unethical pseudo-science of human embryonic experimentation and/or cloning is unnecessary.

Animal-Human hybridisation should not be considered.

Government sponsorship –legislation- or funding, must be directed to support stem cell science that is both ethical and effective.

Introduction

Over 60 years ago C S. Lewis with a degree of prophetic foresight wrote in the—"Abolition of Man"—

"In reality, of course, if any one age really attains, by eugenics or scientific education, the power to make its descendants what it pleases, (then) all men who live after it are the patients of that power. They are weaker, not stronger: for though we may have put wonderful machines in their hands"

This comment might well be reduced to—" The power of man to make himself what he pleases means the power of some men to make other men as they please."

Modern bio-technology has brought us to this brink where we have to choose 1.) Whether human life becomes but a mere commodity to be exploited or used to even extend or improve the life of a select few.

Or

2.) To retain the precept that all human life is intrinsically valuable—to be respected and if you will, regarded as sacred.

To avoid confessing to commodifying life, new arbitrary definitions are created introducing a variable time line before an embryo is deemed a human life. By redefining human embryos as less than human simply to permit their destruction is the ultimate in selective human arrogance.

One might well be tempted to ask if by accepting the evolutionary concept of slime—plus time— plus chance, where human life has no clear purpose—why, when life arises by mere chance, do we strive so hard to extend it— even if this is for a select few?

An even more difficult area of definition concerns the "humanity" of human –animal entities or chimeras now under consideration. For a significant community of scientific adventurers furthermore, now see no difference between human embryo life and animal.

This is one of the first times in human history where we are now committed to using human guinea pigs. The demand to extend human embryonic research we go straight into human research. This is a most bizarre step reflecting on a society no longer respecting the dignity of the human life.

Today we are also seeing a dramatic shift in medical ethics where we no longer hold to the long established and fundamental ethic of medicine that no life should ever be exploited or purposely extinguished, for the benefit of another. Under discussion here are proposals to create human life from ova and sperm only to be destroyed for the benefit of a select few or the ambitious curiosity of an unethical community of biological pioneers.

The latter no longer adhering to either the Nuremburg code which states— 'No experiment should be conducted where there is 'a priori' reason to believe that death or disabling injury will occur...' or further the ethics of the World Health Organisation code describing as unethical any research that destroys human life and in like manner, contrary to the Council of Europe's Convention on human rights & bio-medicine also the AMA policy on Clinical Investigation.

In 2005 the UN International community voted to ban cloning 'as contrary to human dignity' expressing the principle—"No human life should ever be produced to be destroyed for the benefit of another." The clever dodge however, is to devise new terminology to avoid the very idea of cloning. Nevertheless, the procedural steps cannot be so avoided, for somatic cell nuclear transfer SCNT was the very process by which "Dolly" the sheep 'clone' was created by Prof. Ian Wilmut in 1997 at the Roslin Inst. in Edinbburgh.

We should also remember that 'Dolly' died of premature old age merely as a consequence of the 'nuclear cell transfer' adaptation. This I would venture to suggest is not a great prospect for those hoping to have their lives extended by such technology. Notwithstanding, it is worth noting that private funded stem cell research in the US has been funded for instance, by a Texas multi-millionaire openly advocating aspirations for the 'fountain of youth'. It was he who provided funds for the Geron Corporation to take over the Roslin Inst.

Well might we ask why, if an already rich elite are so keen to extend their life span why they should be hogging a disproportionate share of costly research resources? For instance, while another US Company CELERA claims to be advancing in patenting multiplied numbers of human genes. Why should they, as a private organisation, have the 'right 'to own such a high level of humanity and then demand that the community pay to access treatments supplied because of their privileged ownership.

What a tortuous web we weave when we set out to deceive!

Stem Cell Research Deceptions

stem cell therapy V embryonic stem cell cures.

The deceptive use of creative terminology to avoid identifying any link to cloning has become characteristic of <u>embryonic stem cell activism</u>; almost always shunning the embryonic tag and 'lingering' under the collective stem cell umbrella.

The term therapeutic cloning was first attached to present a compassionate image. The other 'dodge' clearly has been to persistently avoid any qualifying distinction between adult stem cell advances and their absence in any embryonic stem cell experimentation. Defined in sporting terminology the score currently reads 72 to 0 for effective [patient specific] adult

One might well ask why advanced adult stem cell research should now be deprived of funding while diverting [public] research finances to prop up the hype and hope uncertainties of embryonic stem cell efforts?

Deceptive innuendo continues when we note that at the 2004 International Society of Stem Cell Research formerly proposed to drop reference to therapeutic cloning because of its negative links to cloning per se and to favour "nuclear transfer" in all communication with 'lay' public.

At the end of last year the world was shocked to learn that after 6 months of accolade Prof. Woo Suk Hwang of Seoul University, South Korea had overseen a grotesque [scientific] fraud and had practiced totally unethical procedures in the exploitation of the women 'ova' donors. (Prof. Hwang has been reported to have coerced female subordinates into contributing in excess of 2000 ova) Furthermore, the very demonstration of this fraud places serious questions over the Lockhart Review recommendations which had placed such high store in the results purported to have derived from the (now fraudulent) South Korean embryonic stem cell research.

The Lockhart Review was presented on 19 Dec. 2005 while the South Korean fraud was exposed 23 Dec. 2005 just 4 days later.

A further smoke screen was exposed in August this year when the "renown" Advanced Cell Technology laid claim in an article in Nature 23 August 2006 that they had extracted stem cells without destroying an embryo but failing to highlight over 16 that had been destroyed in the attempt.

The Lockhart Review itself does not escape scrutiny when by its failure to report on public opinion in relation to embryonic stem cell research.

Of the 1035 submissions received [921 individual, 98 from organisations 8 from government agencies and 8 from MP's] over 80% were opposed to any relaxation of the agreed Fed. Legislative ban 2002.

Repeatedly this over-whelming contrary view against any form of human cloning was glibly acknowledged as 'some', 'several' or merely 'a number'.

The Lockhart review also ignored the widely publicised [Swinburne University] opinion poll of Australian attitudes which found 63% uncomfortable with scientists conducting experiments on human embryos.

Even in its key recommendation the Lockhart review accepts the creation and use of 'human embryo clones' provided they are not allowed to develop for more than 14 days and NEVER implanted into a woman's womb.

Is this not the thin edged wedge following the 2002 cloning ban?

A significant number of the Lockhart review committee had themselves previously expressed favour toward permissive human embryo stem cell research and going even further in recommending animal-human embryos to expedite embryonic stem cell advances or laboratory training.

Issues not widely publicised.

Three issues that fail to be publicly exposed concerning embryo stem cell research are—

- 1. Ova harvesting
- 2. Animal-human embryos
- 3. Drug testing and the associated monetary rewards.

Egg (ova) harvesting though widely used in ART and IVF remains inadequately understood.

Licensing in this arena is reportedly limited and restricted to altruism and not reward. Nevertheless, donor eggs can be purchased for from between \$10,000 and \$50,000 depending on the physical attractiveness of the donor. [Advertisements accessed on the internet]

There is however, a growing trend toward IVF discounting when women offer extra eggs during IVF procedures.

This approach was adopted recently in Newcastle project initially directed by Dr. Miodrag Stojkovic. In this case women are reported to have contributed up to 12 eggs per cycle netting just 66 eggs for a research project over a 7 month period. A special license was needed from the Fertility & Embryo Authority to approve the discounting process.

Similar discounting approaches have been adopted in the UK. Yet this call for women to supply ova for experimental research remains contrary to the UN declaration concerning female exploitation which reads—" *Member States are called upon to take measures to prevent the exploitation of women in the application of life sciences.*"

The Hwang fraud in South Korea has proved to be an enormously costly example of this kind of exploitation.

The Seoul Central District Court has ordered the Mizmedi Hospital to pay over \$63million to the first of a number of women who were persuaded to supply their eggs. The court determined that 'staff' of the fertility clinic failed in their 'duty of care' to inform her that the egg extraction procedure could result in infertility.

It is understood that up to 35 other women are similarly involved and likely to proceed to legal recourse.

Amidst all the hype on embryonic stem cell research there remains a 'conspiracy of silence' concerning these major stakeholders—the women called upon to supply continuously and possibly, very large numbers, of ova.

The issue of informed consent should be high on the list and should rightly list [all] the risks and side effects which can include subsequent infertility and even death.

Recent evidence of the seriousness of ovarian hyper stimulation syndrome [OHSS] has surfaced. Two women have already died in the UK from OHSS.

Meanwhile, there will remain enormous pressure for women to engage in donor practices but what of the ethics surrounding the incentives offered when women are reluctant to become donors? Indeed in Senator Natasha Stott Despoja's tabled draft bill, initiating this inquiry, asks for 'valuable consideration' be given in return for human eggs. In one brief section dealing with consent Senator Despoja's bill asks for consent from either (but not both) an egg donor and the somatic cell donor before any licensed embryo can be used. (How many egg donors and how many somatic cell donors are needed not just for research

(How many egg donors and how many somatic cell donors are needed not just for research but ultimately should ever cures be possible?]

Almost nothing has been said [documented] concerning informed consent.

Informed Consent?

In soliciting informed consent who or what determines the legal validity of that consent? Who determines if/ when, the status and destiny of ova, foetal tissue, gametes or embryos, has been clearly presented—free from vague scientific jargon?

Truly informed consent obligates the informants to disclose that:-

- Risks are involved(both long and short term) in providing ova associated with ovarian stimulation.
- Donated ova/embryos are to be destroyed for the purposes of creating or harvesting stem cells.
- That the embryonic stem-cells come from the embryos themselves.
- That such donor embryonic progeny (product) may be reproduced over and over.
- That embryonic stem cell lines may well be used for testing pharmaceutical products.

• That there are not as yet any guarantees [other than these guidelines] that they are not to be used for experiments on mixed human/animal 'chimeras'.

Guarantees that

- donated embryos are **not** to be gestated in another's womb.
- no kind of adoption formality may subsequently be involved.

Other legal / restrictive issues may be cited in regard to export/import of human embryos or embryonic cell lines which demand serious (lengthy) discussion.

Foetal Harvesting

Another alternative rarely publicised but adopted surreptitiously is the harvesting ova from aborted female foetuses. Foetal farming practices can be located on the internet offering stem cell treatments for various kinds of cures but more commonly cosmetic endowment—in Europe, Thailand and Bolivia.

Senator Kay Patterson's Bill while calling for the unethical cloning of human embryos, with their destruction in mind, also further proposes that scientists create human embryos with more than two genetic parents, and asking that scientists be allowed to create human embryos where one of the parents is an aborted human foetus. **Under her Bill aborted baby girls could become mothers of human embryos that will themselves be killed for research!**

Animal-Human Hybrids and/or Chimera.

Undoubtedly the difficulties, large numbers and risks, associated in obtaining human ova for somatic cell transfer stirs and interest in animal egg-human hybrids.

In the current 'Prohibition of Human Cloning Act 2002' a human-animal hybrid or chimera is defined as—a) a human embryo into which a cell, component part of a cell of an animal is introduced or b) a 'thing' declared by regulation to be a chimeric embryo.

Distinctively a [animal-human] hybrid-embryo is defined as –

- a.) an embryo created by the fertilisation of a human egg by an animal sperm.
- b.) An embryo created by the fertilisation of an animal egg by a human sperm.
- c.) A human egg into which the nucleus of an animal cell has been introduced.
- d.) An animal egg into which the nucleus of a human cell has been introduced.
- e.) A 'thing' declared by regulation to be a hybrid embryo.

Currently each of these entities are prohibited. Notwithstanding, the Lockhart Review in recommendation 24 is suggesting acceptance of d.) above. Namely, introducing a human somatic cell into an animal egg. BUT further, Senator Despoja's draft extends to both chimeric and hybrid embryos.

In like manner, Senator Kay Patterson's Bill while calling for the unethical cloning of human embryos with their destruction in mind, also asks that scientists be permitted to create animal-human hybrid embryos.

This in my opinion is sick science; a moral assault on our humanity, on the meaning of the human family, and on the inviolable right of any living human being *not* to be exploited and killed as subhuman material.

The one restriction seemingly is that under license such hybrid creations should not be kept for more than 14 days.

No guarantees are offered that the potential transfer of animal virus' or chromosomes into the human species will be circumvented or totally avoided.

Drug Testing.

Biologist Alan Trounson has long been an advocate for using rabbit-human embryos— 'beings or things' with rabbit mother eggs and human chromosomes. He at times has been honest enough to concede that the process should be capable of supplying the multiplied thousands of stem cells needed to test the efficacy of drugs for presently incurable human diseases.

Peter Mountford CEO of Melbourne based Stem Cell Sciences stated back in 2000 of their successes in introducing human cell nuclei into pig's eggs to provide a potential source of 'human like' embryonic stem cells.

Prof. Trounson in May 2005 stated—"I don't call it therapeutic cloning because it is **not** about cells for therapy. This is about cells that give us an opportunity to discover what causes a disease and whether we can interfere with that." [Presumably by means of drug testing.]

Michael Lytton of Oxford Bioscience Partners is another advocate for the human –animal hybrid resource for toxicity [drug] testing. He concedes that while direct human embryo stem cell therapies are unlikely, the use of animal-human stem cells for drug testing has the promise of <u>quicker</u> financial return.

A small Californian company VISTA is already advancing in this direction.

Similar opinion has been expressed by Prof. Bob Williamson at the Australian Academy of Sciences; Jan. 2006. He moreover, concurred that direct cell treatments were more likely from adult stem cells.

Stephen Livesey of the Australian Stem Cell Centre has commented... "The reason why scientists want to create a nuclear transfer embryo is for the tiny mass of inner cells that are stem cells (which) could provide a safe and sustainable way of testing, in the laboratory, new drugs and theories on cells that carry the human disease trait." [in the Financial Review 10-9-06]

Well might we conclude that stem cells from cloning embryonic stem cells are <u>not</u> required for cures or personal disease repair kits <u>but</u> rather as research tools –as a way to obtain 'disease specific' stem cells for drug testing or genetic research of inherited diseases.

Concluding Statement.

It is now evident that no significant new scientific advances have been made in the last four years since the Federal Government placed (in 2002) a blanket ban to prohibit human cloning by whatever name it might be defined- including therapeutic cloning and somatic nuclear cell transfer. And moreover, no evidence of disease cures by way of embryonic stem cell research advances have been provided.

This same conclusion was reached by the mpconsulting group June 2006 for the Department of Prime Minister and cabinet.

It is strange to recall that Senator Kay Patterson once a strong opponent of embryonic experimentation is now contributing to draft legislation to extend 'life destructive' embryonic

stem experimentation and further, to embrace foetal farming and animal-human hybrid cloning.

In 2002 she clearly recognised that it was morally wrong—" to create human embryos solely for research----with the intent of truncating them at an early stage for the benefit of another human being." If it was morally wrong in 2002, what imperative or ethical environment, has changed that makes it more ethical and morally right in 2006?

Senator Patterson's changed morality now proposes to create and kill human embryos, farm foetuses and create hybrids, purely for mere speculative science.

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