Submission

to the
Legislative Review Committee
on
Recommendations of the Lockhart Review

Jane Munro,

The Recommendations of the Lockhart Review need to be rejected.

- Respect for the embryo as human life is not defined
- Live human embryos would be used for experimentation and research
- The original definition of human embryo has been altered.
- The vast number of eggs required will be difficult to obtain, and harmful to women.
- The dangers of interspecies hybrids is not acknowledged
- Embryonic stem cells may never produce cures
- Therapeutic cloning which in the initial stages is identical reproductive cloning is recommended.

The Committee's view and recommendations

Introduction

The Committee observed that there are wide ranging views on embryo research and human cloning, and claimed the need to "take into account the needs, beliefs and concerns of the whole community."

Comment

Since approximately 80% of submissions received by the Senate Committee Inquiry into Human Cloning were against cloning, and properly conducted Polls have achieved a similar percentage, it would appear the Committee has not taken the middle ground but has pushed into an area of research not approved of by the general public.

Recommendations 15 to 19. ART clinical practice and ART research

Recommendation 23 - use of human embryos created by somatic cell nuclear transfer,

are called for by the Committee

To derive stem cells
To examine new culture media used in ART practice
To understanding embryonic development and fertilisation
To train clinicians in micro-surgical ART techniques
To examine gene expression patterns of developing embryos; and
To test ART techniques.

However research conducted by the Southern Cross Bioethics Institute in 2002 showed that the majority of reported uses of human embryos in research actually involved,

Toxicology studies on live human embryos and
Testing new drugs on humans rather than animals,

Comment
It would appear that human embryos are readily available resource for testing drugs now that animals are no longer so freely available thanks to the work of groups like Animal Liberation.

The Committee's explanation for Recommendations 23 and 24 states that embryonic precursor cells and gene technology should be ….permitted ….to advance knowledge and develop therapeutic applications.

Embryonic Stem Cells may never produce cures.

Because embryonic stem cells are undifferentiated, they are capable of producing the ectoderm (gives rise to the skin and nervous system) mesoderm (muscle, bone, connective tissue) and endoderm (digestive tract and its outgrowths) of the person, after further development. Some scientists do not believe that they will ever be useful as stem cells because of the propensity to form tumours composed of skin, hair and bone. After differentiation embryonic stem cells lose this uncontrollable nature, however they are then no longer embryonic stem cells.

The following list compares cures/benefits from adult stem cells with those from embryonic stem cells.
Updated: 7/16/2006

Check the Score: Adult Stem Cells vs. Embryonic Stem Cells
Benefits in Human Patients (from Peer-Reviewed Studies)

Adult Stem Cells	**Embryonic Stem Cells**
Cancers:	
1. Brain Cancer	
2. Retinoblastoma	
3. Ovarian Cancer	
4. Skin Cancer: Merkel Cell Carcinoma	**NIL**
5. Testicular Cancer	
6. Tumors Abdominal Organs Lymphoma	

7. Non-Hodgkin's Lymphoma
8. Hodgkin's Lymphoma
9. Acute Lymphoblastic Leukemia
10. Acute Myelogenous Leukemia
11. Chronic Myelogenous Leukemia
12. Juvenile Myelomonocytic Leukemia
13. Chronic Myelomonocytic Leukemia
14. Cancer Of The Lymph Nodes: Angioimmunoblastic Lymphadenopathy
15. Multiple Myeloma
16. Myelodysplasia
17. Breast Cancer
18. Neuroblastoma
19. Renal Cell Carcinoma
20. Soft Tissue Sarcoma
21. Various Solid Tumors
22. Ewing's Sarcoma
23. Waldenstrom's Macroglobulinemia
24. Hemophagocytic Lymphohistiocytosis
25. Poems Syndrome
26. Myelofibrosis

Auto-Immune Diseases:

27. Systemic Lupus
28. Sjogren's Syndrome
29. Myasthenia
30. Autoimmune Cytopenia
31. Scleromyxedema
32. Scleroderma
33. Crohn's Disease
34. Behcet's Disease
35. Rheumatoid Arthritis
36. Juvenile Arthritis
37. Multiple Sclerosis
38. Polychondritis
39. Systemic Vasculitis
40. Alopecia Universalis
41. Buerger's Disease

Cardiovascular:

42. Acute Heart Damage
43. Chronic Coronary Artery Disease

Ocular:

44. Corneal Regeneration

Immunodeficiencies:

45. Severe Combined Immunodeficiency Syndrome
46. X-Linked Lymphoproliferative Syndrome
47. X-Linked Hyper Immunoglobulin M Syndrome

Neural Degenerative Diseases And Injuries:

48. Parkinson's Disease
49. Spinal Cord Injury
50. Stroke Damage

Anemias And Other Blood Conditions:

51. Sickle Cell Anemia
52. Sideroblastic Anemia
53. Aplastic Anemia

54. Red Cell Aplasia
55. Amegakaryocytic Thrombocytopenia
56. Thalassemia
57. Primary Amyloidosis
58. Diamond Blackfan Anemia
59. Fanconi's Anemia
60. Chronic Epstein-Barr Infection

Wounds And Injuries:

61. Limb Gangrene
62. Surface Wound Healing
63. Jawbone Replacement
64. Skull Bone Repair

Other Metabolic Disorders:

65. Hurler's Syndrome
66. Osteogenesis Imperfecta
67. Krabbe Leukodystrophy
68. Osteopetrosis
69. Cerebral X-Linked Adrenoleukodystrophy

Liver Disease

70. Chronic Liver Failure
71. Liver Cirrhosis

Bladder Disease

72. End-Stage Bladder Disease

For references see http://www.stemcellresearch.org/facts/asc-refs.pdf
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Recommendation 28 - definition of a human embryo

The definition of "human embryo" has been altered since the 2002 review. The Lockhart Review states:

A human embryo is a discrete entity that has arisen from either:

(a) the first mitotic division when fertilisation of the human oocyte by a human sperm is complete.

(b) Any other process that initiates organised development of a biological entity with a human nuclear genome or altered human nuclear genome that has the potential to develop up to, and beyond, the stage at which the primitive streak appears;

This definition effectively consigns the human embryo for the first 16 hours of development to no-man's land, leaving it without identity, protection or even acknowledgment of its existence. It already is a new individual with its own genetic blueprint. Within 6 to 24 hours after fertilisation the zygote sends a hormone to the ovary of its mother called the "ovum factor" to protect its own newly created life. This ovum factor is secreted by the ovum soon after sperm penetration. The mother's ovaries them secrete the "Early Pregnancy Factor" into the blood stream where the lymph glands pick it up and respond by releasing immuno-suppressant factors which protect the zygote from being attacked and destroyed by the mother's immune system because he or she is a foreign body.

Comment
It would appear Nature knows a new human life has been formed even if the Lockhart Committee and Senator Patterson and Senator Stott-Despoya are unwilling to acknowledge it.

This definition of embryo appears to have no scientific basis, only the convenience of research and experimentation in the first hours of life being able to be carried out without interference .

Recommendations 31 - 33 - egg donation

Obtaining the number of eggs required will be difficult. Simple maths would indicate that obtaining the required number of eggs for research into even one of the many diseases frequently touted as being curable by the use of embryonic stem cells, would be impossible without resort to obtaining them from overseas. This is of grave concern because it could involve the coercion of poor women into a commercial enterprise, which could impair their health.

Professor Diane Beeson, (California State University) recently appeared before the U. S. House of Representatives subcommittee on criminal justice, drug policy and embryonic stem cell research. She spoke about ovarian hyper-stimulation syndrome. (OHSS) “The frequency of severe OHSS is estimated to be as high as 10 percent of women who undergo the procedure.” There have been deaths reported from OHSS.

Recommendations 24 human nuclear transfer into animal eggs.

The mitachondria, which is separate to the nucleus, contains approximately I% of the beings genetic makeup. At present these hybrid humans will only be allowed to live for 14 days, however given the speed of descent down the slippery slope how much longer will it be before second class hybrid citizens are deliberately created?
The real danger of infections, either viral or prions, from interspecies embryos appears to have been overlooked.

How things have changed since 2002

In the last four years humanity has gained much from stem cell research,

adult stem cell research.

In spite of incredible hype, promotion and financial backing for research over a twenty year period, embryonic stem cell cures have proven to be a fantasy.

Prior to 2002 biotechnologists repeatedly told us that all they wanted for use in stem cell research was access to left-over IVF embryos, that were destined to be destroyed anyway. Now they appear to be demanding a legal licence to conduct cloning research on a much broader scale.

Politicians who ridiculed the notion of the slippery slope in 2002, are now
leading the charge toward the creation of embryos as commodities,
to use one human being to provide spare parts for another,
and to create an under class of human life only worthy of having its cells remove for experimentation or the testing of drugs.

Senator Patterson: *"I believe it is disingenuous to suggest that approving this research will open the door to further killing of living human beings when the Prohibition of Human Cloning Bill 2002 bans the creation of a human embryo for a purpose other than achieving a pregnancy."*

Senator Patterson: *"It is not morally permissible to develop an embryo with the intent of truncating it at an early stage for the benefit of another human being."*