HOUSE BILL REPORT
HB 1268

As Reported by House Committee On:
Health Care

Title: An act relating to stem cell research.

Brief Description: Regulating stem cell research.

Sponsors: Representatives Schual-Berke, Jarrett, Tom, Sommers, Dickerson, Cody, Hankins, Murray, Hudgins, B. Sullivan, Fromhold, Haler, Appleton, Wallace, Kagi, Dunshee, Springer, Upthegrove, Kenney, Quall, Pettigrew, Morris, Darneille, Moeller, Morrell, Hunt, Lovick, Kessler, Williams, Roberts, Chase, Santos and McIntire.

Brief History:
Committee Activity:
Health Care: 2/1/05, 2/11/05 [DP].

Brief Summary of Bill

- Establishes the Human Stem Cell Research Advisory Committee to develop guidelines for conducting research on human embryonic stem cells.
- Requires health care providers to inform fertility treatment patients of their options regarding the disposal of unused embryos. Requires patients to provide written consent before donating unused embryos for research.
- Prohibits reproductive cloning or attempted reproductive cloning of a human being.

HOUSE COMMITTEE ON HEALTH CARE

Majority Report: Do pass. Signed by 8 members: Representatives Cody, Chair; Morrell, Vice Chair; Appleton, Clibborn, Green, Lantz, Moeller and Schual-Berke.

Minority Report: Do not pass. Signed by 6 members: Representatives Bailey, Ranking Minority Member; Curtis, Assistant Ranking Minority Member; Alexander, Condotta, Hinkle and Skinner.

Staff: Chris Blake (786-7392).

Background:

The Biology of Stem Cells

Stem cells can be distinguished from other types of cells in three ways. First, they are capable of dividing and replicating (renewing) themselves indefinitely. Second, stem cells are unspecialized. This means that they do not perform any specific function, as do heart muscle cells, red blood cells, or nerve cells. Lastly, stem cells can create specialized cells. While stem cells do not perform a particular function, they can give rise to specialized cells while remaining unspecialized themselves.

Stem cells can be classified as embryonic stem cells, embryonic germ cells, and adult stem cells according to the stage of development of the organism. The key difference between embryonic stem cells and adult stem cells is that an embryonic stem cell can become any type of cell in the body, while adult stem cells can only vary between the different types of cells within the organ in which they are found. Some research, however, has suggested that adult bone marrow stem cells may have similar characteristics. Another significant difference is that embryonic stem cell replication can generate large numbers of new cells, while adult stem cells do not replicate as easily under current technology.

Scientists obtain human embryonic stem cells from the blastocyst stage of embryos that are not used after in vitro fertilization treatment. The blastocyst is the stage of embryonic development that occurs approximately four to five days after fertilization of the oocyte and prior to implantation in the uterine wall. In 1998 scientists first isolated and cultured human embryonic stem cells, a process that destroys the embryo. Current research using stem cells pertains to diabetes, Parkinson's disease, heart disease, stroke, cancer, arthritis, burns, congenital birth defects, and spinal cord injury.

Cloning

Cloning is the process where scientists make a genetic copy of another animal by asexual reproduction. A genetically identical animal is made by transplanting the nucleus from a specialized cell into an unfertilized egg that has had its nucleus removed. Sheep, mice, goats, pigs, and cows have all been cloned. The determination of whether or not one animal is a clone of another is made by comparing the DNA of both creatures.

Federal and State Policy on Stem Cells

In 1995, Congress passed legislation prohibiting the use of federal funds for research that may harm a human embryo. The most recent executive order to interpret this law was issued in August 2001 when the President announced that federal funding of embryonic stem cell research would be permitted only for research on the embryonic stem cell lines in existence at that time; funding would not be available for any subsequently created embryonic stem cell lines. The limitation does not apply to privately funded research. At the same time, the President announced the creation of the President's Council on Bioethics to study the ethical and moral implications of developments in biomedical and behavioral science and technology.

In the past few years some states have passed legislation regulating stem cell research. Bills were enacted in South Dakota and Kansas to restrict the use of human embryonic stem cells for research, while California and New Jersey have declared that it is their policy to permit

research regarding human embryonic stem cells, human embryonic germ cells, and human adult stem cells. Several states have created institutes to coordinate stem cell research, including California which recently passed Proposition 71 to provide $3 billion to fund stem cell research.

Summary of Bill:

Definitions are provided for several terms related to cell biology. A "blastocyst" is defined as a preimplantation embryo consisting of about 150 cells with an inner layer comprised of undifferentiated cells that have the potential to become any type of cell in the human body. "Reproductive cloning of a human being" is defined as asexual reproduction of a human being by transplanting a blastocyst that has been created by replacing the nucleus of an oocyte with a human somatic cell and transferring it into a uterus or uterus substitute.

The Human Stem Cell Research Advisory Committee (Committee) is established to develop guidelines for conducting research on human embryonic stem cells in Washington. The guidelines shall balance the state policy of promoting research involving human embryonic stem cells and the ethical considerations of conducting such research. The Committee may update the guidelines and issue advisory opinions as required by developments in research and medicine. The Committee consists of 13 members appointed by the Governor. Membership consists of seven scientists with biomedical research experience, two medical ethicists, two people with legal background in issues related to the donation of blastocysts and oocytes, and two members of the public.

Health care providers that deliver fertility treatment to patients must provide them with adequate information to make an informed choice regarding the disposition of unused human blastocysts after treatment. Patients must be presented with the options of disposing of unused blastocysts including storing them, discarding them, donating them to another person, or donating them for research. Patients must also receive a form that details the patients' preferred disposition of any unused blastocysts in the event of the death of a patient, the separation or divorce of the partners, or the abandonment of the blastocysts due to failure to pay the storage fee. Before donating the unused blastocysts for research, the patient must provide written consent. Elements of what constitutes informed consent are established. The use of human eggs or human sperm that have been donated for the purpose of assisted reproduction may not be used for research purposes without the donor's written consent.

Reproductive cloning or attempted reproductive cloning of a human being is prohibited and carries a civil penalty of $100,000 for each violation.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect 90 days after adjournment of session in which bill is passed.

Testimony For: Research on human embryonic stem cells offers hope for cures for many diseases. Encouraging stem cell research in Washington could offer an opportunity for economic development. The use of human embryonic stem cells is morally warranted if it can lead to saving lives or healing others. The blastocysts used to obtain human embryonic stem cells for research are otherwise discarded after in vitro fertilization treatment.

Testimony Against: Adult stem cells are an alternative to using embryonic stem cells that have already helped numerous patients. There are potential problems with using human embryonic stem cells for medical therapies. The destruction of human embryos is immoral even if for medical research.

Persons Testifying: (In Support) Representative Schual-Berke, prime sponsor; Cathy and Caity Rigg; Dennis Wright; Alex Goldberg, Washington Advocates for Medical Research; Tracy Craig, Amyotrophic Lateral Sclerosis Association; Ann Hedreen, patient advocate; Suzanne Holland, PhD, University of Puget Sound; Reverend Adrienne Schlosser-Hall, Cancer Care Chaplain; Jackie Der, Randall Moon, Chuck Murry, and Tony Blau, University of Washington.

(Opposed) Matt Muckler, Washington State Catholic Conference; John D. Mallinger; Dr. Patricia O'Halloran; and Dr. Sharon Quick, American Academy of Medical Ethics.

Persons Signed In To Testify But Not Testifying: (In support) Hans G. Wold; Ruth Shearer; Angela Song; and Vicki Austin, Washington Biotechnology and Biomedical Association.

(Opposed) Doug Gardner.