

## Position Statement on Adult and Embryonic Stem Cell Research and Cloning for Therapeutic Purposes

10/31/2006: Approved by Domestic Public Policy Task Force

2/14/2007: Approved by Executive Committee 2/21/07: Approved by the Board of Directors

Wisconsin has been a leader in the field of stem cell research. Some of the first stem cell lines were developed at the University of Wisconsin and the University holds many important patents relating to the field.

**Background.** The great interest in human stem cell research derives from the potential of stem cells to replace diseased or abnormal cells and perform the functions of these cells before they cease to function normally. Thus, illnesses characterized by tissue degeneration are potential targets for stem cell therapies, including Parkinson's and Alzheimer's diseases, spinal cord injury, stroke, burns, heart disease, Type 1 diabetes, osteoarthritis, rheumatoid arthritis, muscular dystrophies and liver diseases.

Stem cells are undifferentiated cells that do not have a specific function but under various conditions, have the capacity to evolve (differentiate) into particular cell types which take on specialized functions in various organ systems. Scientists primarily work with two kinds of stem cells from humans: <a href="mailto:embryonic stem cells">embryonic stem cells</a> (ESC) and <a href="mailto:adult-stem cells">adult stem cells</a> (ASC). which have different functions and characteristics. <a href="mailto:embryonic stem cells">Embryonic stem cells</a> are derived from early stage human embryos. These embryos can be obtained from many sources but the most abundant source are the excess embryos from <a href="mailto:invitro">in vitro</a> fertilization (IVF).

Scientific research in this area also includes the therapeutic cloning research known as **somatic cell nuclear transfer (SCNT) technology**. In this technique, the nucleus of an unfertilized egg cell is removed and replaced with the genetic material from the nucleus of a somatic cell (any cell of the body except sperm or egg cells). The egg is then stimulated to begin dividing, and stem cells can be extracted 5-6 days later. When the somatic cell is supplied from the cells of a given person, the stem cells isolated from the developing eggs can be used to make a tissue that will not be rejected by that person's immune system because they contain his or her own genetic material.

A debate has emerged in American society at large and among our elected leaders (both at the state and national level) as to whether public policy should permit, encourage, restrict or ban the further conduct of this biomedical research. President Bush has placed limitations on the federal funding of embryonic stem cell research, which has significantly limited embryonic cell research in the United States. It should be noted that research on these lines can still be supported by non-federal funds. While federal funding continues to be available for adult stem cell research, most researchers believe there are major limitations to using adult stem cells for research and that embryonic stem cell research is a much more promising area of inquiry. Other newer approaches such as using fetal cells found in amniotic fluid may also be promising, though as yet unproven, and should also be pursued.

**The Jewish Perspective.** In the Jewish community, there is strong support for the life-saving potential of stem cell research, and specifically embryonic stem cell research. A wide range of Jewish groups have actively advocated for public funding of this research including the Reconstructionist Rabbinical Association, the Union of Orthodox Jewish Congregations of America, the United Synagogue of Conservative Judaism, the Union for Reform Judaism, National Council of Jewish Women, and Hadassah.

Our Jewish tradition places great value on preserving life and promoting health while at the same time preserving our Jewish heritage and traditions. The Torah commands us to preserve human life and health—pikuah nefesh - by treating and curing the ill and defeating disease whenever possible. In addition, our tradition states an embryo in vitro does not enjoy the full status of human-hood and its attendant protections. Thus, stem cell research and therapeutic cloning may be consistent with and serve these moral and noble goals; however, such research must not be pursued indiscriminately and should be conducted with appropriate oversight and guidelines. If stem cell research can be conducted on cells derived from embryos donated to IVF clinics which will not serve the clinical needs of the individuals seeking IVF treatment, and if the donors are required to provide written consent, and the goals of such research seek to advance our ability to heal humans with greater success, it ought to be pursued, since it does not require or encourage the destruction of human life in the process.

## **Action Recommendations.**

Because of the potential of stem cell research and therapeutic cloning to save lives and promote health, the Milwaukee Jewish Council for Community Relations:

- Supports embryonic stem cell medical research, using both adult stem cells and embryonic stem cells
  derived from excess embryos from IVF, and research using somatic cell nuclear transfer (SCNT)
  technology for therapeutic cloning.
- Supports government funding for all such research; and
- Supports efforts by the scientific community and ethicists to develop regulations and monitor the acquisition of such embryos and such research.
- Opposes efforts in Congress or the Wisconsin Legislature to limit research or restrict or penalize scientists, clinicians, or patients who may participate in stem cell research and SCNT technology for therapeutic purposes.