MASSACHUSETTS CATHOLIC CONFERENCE WEST END PLACE

150 Staniford Street, Boston, MA 02114-2511 Phone (617) 367-6060 FAX (617) 367-2767

LEGISLATIVE TESTIMONY

To: Members of the Joint Committee on Public Health

From: Daniel Avila., Esq., Associate Director for Policy & Research

Re: House 611, "An Act Relative to Reprogrammed Human Skin Cells for Embryonic Stem

Cell Research"

Date: May 10, 2011

The Massachusetts Catholic Conference ("Conference") respectfully submits this testimony in support of House Bill 611, "An Act Relative to Reprogrammed Human Skin Cells for Embryonic Stem Cell Research."

HB 611 would amend Massachusetts law governing scientific and medical research involving the use of human stem cells by:

- 1. prohibiting the creation, experimental use, and destruction of human embryos for research purposes;
- 2. authorizing research involving the use of adult stem cells obtained from reprogrammed skin cells in a manner that does not harm human life;
- 3. removing current statutory authorization to individuals to donate their gametes to embryonic stem cell researchers; and
- 4. preventing the transfer of "abandoned" embryos created through in vitro fertilization for embryonic stem cell research.

Since the passage of the Act Enhancing Regenerative Medicine in the Commonwealth (2005 Mass. Acts 27), endorsing research involving the destruction of human embryonic life, remarkable scientific advances have occurred using adult stem cells, such as what the bill refers to as reprogrammed skin cells, that can be obtained without harming human embryos.

This past February, the Harvard Crimson newspaper carried a story on the remarkable progress in adult stem cell research that began with this sentence: "Two new studies by Harvard stem cell labs have shown that human induced pluripotent stem cells (iPSCs) are the equivalent of human embryonic stem cells for the purpose of reconstructing certain key types of cells, including neurons." Shane R. Bouchard, *Study Finds New Stem Cells Effective*, The Harvard Crimson, Feb. 18, 2011. Using a "cutting edge test for pluripotency", researchers determined that stem cells derived from adult stem cells "are comparable in functionality to embryonic stem cell lines." Id.

Moreover, a week ago on May 2, results from another study by two researchers at the Boston University School of Medicine confirmed that even though embryonic stem cells and adult stem cells have differences at the molecular level, both "show [a] highly similar capacity to be

¹ Available at http://www.thecrimson.com/article/2011/2/18/cell-lines-stem-new/?print=1.

Archdiocese of Boston—Dioceses of Fall River, Springfield, Worcester

differentiated in vitro into definitive endoderm progenitors — the cells from which thyroid, lung, liver, and pancreas are derived." Press Release, "Cells Derived From Different Stem Cells: Same or Different?" (May 2, 2011) (announcing publication of results in the latest Journal of Clinical Investigation from experiments on mice stem cells by Darrell N. Kotton and Gustavo Mostoslavsky). For references to the earlier and dramatic scientific breakthroughs in creating human stem cells as powerful as those derived by destroying human embryos, see Testimony of Edward F. Saunders, Massachusetts Catholic Conference, submitted to this Committee on January 19, 2010.³

Last fall, congressional testimony by a researcher using adult stem cells at Wayne State University highlighted the significant advances in successfully using these cells to treat patients with such conditions as severe spinal cord injury, chronic heart failure, corneal blindness, sickle cell anemia, juvenile diabetes, multiple sclerosis, leukemia and other cancers. Jean Peduzzi Nelson, Testimony on the Promise of Human Stem Cell Science, before the United States Senate Subcommittee on Labor, Health and Human Services, and Education, Committee on Appropriations (Sept. 16, 2010).⁴

Dr. Peduzzi told the committee that there was a real need for funding of adult stem cell research since "[t]he financial challenge with adult stem cells is that usually when you use your own cells, there is usually no intellectual property or patents. So, the biotech industry that invests <u>billions</u> in research does not fund this research." Id.

To date there is only one clinical trial using embryonic stem cells, involving the treatment of a young man, Timothy J. Atchison in Alabama, with spinal cord injuries. Rob Stein, *Stem Cells Were God's Will, Says First Recipient of Treatment*, Wash. Post, April 15, 2011. However, "[s]pinal-cord injury experts stress that patients such as Atchison can regain some sensation and movement on their own and that it is impossible to know whether the cells are helping based on a single subject. Advocates for such patients, although thrilled by the study, worry about raising false hope." Id.

Arthur Caplan, an ethicist and supporter of embryonic stem cell research, looking back on the debates in Massachusetts, California and in Congress within the last ten years, admitted recently that:

Embryonic stem-cell research was completely overhyped, in terms of its promise. And people knew it at the time. I tried to say so myself at different times myself, even though I support embryonic stem-cell research. But this notion that people would be out of their wheelchairs within a year if we could just get embryonic stem-cell research funded was just ludicrous. Just simply silly.

³ Available at http://www.macathconf.org/10-TestimonyEdStemCellBillHouse2132Jan.pdf.

² Available at http://www.eurekalert.org/pub_releases/2011-05/joci-cdf042811.php.

⁴ Available at http://appropriations.senate.gov/ht-labor.cfm?method=hearings.download&id=50075d32-080c-4b0c-8ce0-759565ca328c.

⁵ Available at http://www.washingtonpost.com/national/stem-cells-were-gods-will-says-first-recipient-of-treatment/2011/04/14/AFxgKIjD_story.html?wpisrc=emailtoafriend.

Arthur Caplan in Sherif Gergis, *Stem Cells: The Scientists Knew They Were Lying?*, ThePublicDiscourse.com (April 13, 2011).⁶

For pragmatic as well as moral reasons, the legislative endorsement of research that involves the cloning and destruction of human embryos, that unnecessarily invites controversy and false hope, and that diverts resources from effective, ethical and universally approved alternatives for finding cures, should be rescinded. HB 611 would restore the Commonwealth's fundamental regard for the protection of vulnerable human life without sacrificing the value of promoting life-saving research.

For these reasons, the Conference urges the Committee to give HB 611 a favorable report recommending the bill's passage.

The Massachusetts Catholic Conference is the public policy office of the Roman Catholic Bishops in the Commonwealth, representing the Archdiocese of Boston and the Dioceses of Fall River, Springfield, and Worcester.

_

⁶ Available at http://www.thepublicdiscourse.com/2011/04/2490.