

Stem Cell Research: A Study and Advocacy Toolkit for Clergy

Concerned Clergy for Choice
Rabbi Dennis S. Ross, *Director*

Concerned Clergy for Choice is a project of the Education Fund of Family Planning Advocates of New York State, with the generous support of the Robert Sterling Clark Foundation.



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Concerned Clergy for Choice

Concerned Clergy for Choice is a project of the Education Fund of Family Planning Advocates of New York State. With the support of the Robert Sterling Clark Foundation, Concerned Clergy for Choice is a statewide network of more than 900 religious leaders representing a wide spectrum of backgrounds, beliefs and practices, advocating for regenerative medicine and open access to a full range of reproductive health services and options. Network members offer a pro-choice religious presence from the pulpit, in classrooms, in the media, in the state capital and across New York State.

Clergy are welcome to call for assistance in developing community programs on stem cell research and reproductive health and justice.

Concerned Clergy for Choice

Rabbi Dennis S. Ross, *Director*

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Introduction

Stem Cell Research: Amid the Controversy, Religious Support

A cold goes away by itself. A skinned knee is healed with a bandage and first aid cream. Yet there are persisting medical conditions that no doctor or medicine can cure. For many of these conditions, science turns to stem cell research with hope.

Imagine a child with diabetes avoiding the burdens of testing and injections because a stem cell implant supplements a failing pancreas, generating insulin.

Imagine a friend with the stiffness and shaking of Parkinson's disease whose stem cell implant restores dopamine production to the brain stimulating the return of normal movement.

Imagine a neighbor with a spinal cord injury whose stem cell implant mends a damaged myelin sheath allowing his limbs, once paralyzed, to move again.

Stem cell research seeks to find treatments for illnesses and injuries such as Parkinson's disease, serious burns, spinal cord injury, diabetes and other life-threatening and life-altering conditions that elude effective treatment. The research utilizes stem cells to produce healthy cells for transplant to replace human tissues damaged by diseases or accidents. Amid the hope for dramatic life sustaining and life-saving results, stem cell research can evoke strong support and opposition among religious and political groups.

The methods of stem cell research—the most promising of which are embryonic stem cell research and somatic cell nuclear transfer (SCNT)—utilize human reproductive tissues, which arouse the same kind of religious and political debates that surround abortion. Exploiting the widespread and mistaken public perception that all religions consider abortion a sin, some religious leaders extend their faith-driven opposition to any medical research that manipulates or destroys the human embryo. Yet many of the religious groups and leaders supporting contraception and a woman's right to decide among her pregnancy options are equally supportive of embryonic stem cell research. A number of these religious groups also support SCNT. Clergy from these denominations can act as valuable stem cell research advocates.

As with abortion, many medical providers and advocates try to disassociate themselves from the surrounding religious controversy; they want to keep science separate from faith. For decades, however, clergy have offered highly effective counter voices to the unrelenting religious opposition to accessible contraception and abortion. Today, many groups, including the Concerned Clergy for Choice network, successfully advocate for a variety of reproductive health issues, including comprehensive sex education, access to emergency contraception, stem cell research and public funding for abortion. Religious

leaders who support embryonic stem cell research and SCNT are in an ideal position to dispel the perception that all religions oppose stem cell research.

This introductory paper, produced by Concerned Clergy for Choice, summarizes the compelling medical, political, religious and advocacy concerns surrounding stem cell research. It seeks to give clergy the tools to become more effective stem cell research advocates. It also provides healthcare advocates and policy makers with a means of encouraging clergy to take public advocacy roles.

Winning the Public Debate: What Can Clergy Contribute?

Clergy speak as pastoral care providers

As pastoral care providers, clergy are intimately acquainted with the debilitating effects of the medical conditions stem cell research seeks to address. Clergy spend countless hours listening to people's stories, offering prayer and consolation, and mobilizing the members of their houses of worship to offer support for the sick and their loved ones. In the public debate over stem cell research, clergy can speak to the urgent need to ameliorate real-life hardship. By pointing to their pastoral care experience, clergy can effectively shift the debate away from the status of the embryo to the compelling and urgent ethical responsibility to care for the afflicted.

Clergy can cite supportive faith teachings

When speaking on behalf of stem cell research, clergy can cite religious teachings that advance a sympathetic and supportive public perception. Clergy emphasize scriptural and other religious mandates to expand the fund of human scientific knowledge and invent novel medical treatments. Clergy speak of the modern doctor as God's agent of healing and of the basic human right to benefit from the healing powers of medical science. Even as they call for the establishment of research protocols that provide for responsible treatment of human tissues, clergy consider the status of the human embryo and point to the religious basis for pursuing the higher moral imperative of bringing comfort and healing to those in need of treatment.

Clergy offer an effective counter voice to the Religious Right

Clergy are the most effective advocates when there is a need to dispel the common and erroneous misconception that all people of faith oppose embryonic stem cell research. When speaking to researchers, sympathetic policy makers, in houses of worship, and to people in need of cures, clergy offer the reassurance that stem cell research is the right thing to do. The views of moderate and progressive clergy countering the prevailing and incorrect public impression about religion and stem cells intrigues, and is often promoted by, the media. As The Rev. Tom Davis documents in his book *Sacred Work: Planned Parenthood and its Clergy Alliances*, religious leaders have historically been strong and consistent advocates for reproductive health and related issues since the inception of the family planning movement.

Chapter 1:

The Science of Stem Cell Research

The Promise of Stem Cell Research

Stem cell researchers seek cures for a multitude of diseases, illnesses and conditions that baffle and frustrate patients and clinicians alike. Stem cell research strives to produce healthy cells that may be transplanted into humans to replace damaged tissues. Stem cell researchers also hope to gain new insights into the origins of some diseases. They also hope to generate tissues that could be used for drug testing, replacing animal and human trials.

In the search to cure diabetes, for instance, researchers are attempting to stimulate cells to grow into islets of human pancreatic cells that produce insulin. Transplanting these cells into the pancreas of a person with the juvenile type of diabetes, whose own islet cells have been attacked by a misdirected immune system, would generate the needed insulin and circumvent the need for constant blood monitoring and injections. Parkinson's disease destroys the cells that make dopamine, a nerve cell transmitter. Stem cell tissue transplants could replace these destroyed cells and restore normal movement. In some cases of spinal cord injury, the cord has not actually been cut; the cells that produce nerves to insulate the myelin sheath are absent or damaged. Stem cell technologies may one day replace these lost cells. A victim of spinal cord injury, the late Christopher Reeve, said that stem cell research opens "one of the most promising lines of inquiry that research medicine has ever developed."

Stem cells are self-replicating. This means that stem cells can, in theory, reproduce into stem cell lines that can be sampled for a variety of research purposes. Science seeks to harness this ability to self-replicate, channeling the reproductive power of stem cells into the production of tissue-specific tools.

While stem cell researchers use stem cells drawn from a variety of sources—umbilical cord blood and adult stem cell sources, among others—embryonic stem cells and somatic cell nuclear transfer (SCNT) appear to offer major research advantages.

Adult Stem Cells

There are three sources for research stem cells. The first source, adult stem cells, are found in the particular organ that they will grow into—blood stem cells that will replace aging and deteriorating blood cells, bone stem cells that will replace bone, etc. Scientists gather these adult stem cells for use in their research. Adult stem cells are also known as non-embryonic human stem cells because they come from places other than the human embryo: the adult, child, newborn or fetus.

While adult stem cells are proven to cure a number of medical conditions, they have some serious research and implant limitations. Adult stem cells are multipotent, meaning they only grow into the same type of cells from which they are derived—skin stem cells grow only into skin, bone stem cells grow only into bone, etc. Ideally, researchers would want stem cells that are pluripotent, possibly capable of generating just about any kind of human tissue. Furthermore, when adult stem cells are taken from one person and implanted into another, the body may reject the implant like any other transplanted organ, possibly requiring a life-long commitment to potentially harmful anti-rejection drugs. Finally, adult stem cells are scarce in the human body and difficult to gather in the large quantities necessary for research.

Stem cells harvested from umbilical cord blood may prove pluripotent, which eliminates many of the limitations posed by adult stem cell use. However, like tissues derived from adult stem cells, tissues derived from cord blood might present a potential rejection risk if implanted in anyone but their donor.

Despite the limited research and implant use of adult stem cells, they bring one clear advantage: the research and use does not stir political or religious controversy.

Embryonic Stem Cells

Embryonic stem cells are the next source of research tissues. As the name indicates, embryonic stem cells come from the human embryo, less than seven days old, and thus are not from the human fetus. Scientists consider embryonic stem cells to be pluripotent, making them potential sources of skin, blood, bone and nerve tissue. Additionally, embryonic stem cells can grow in the lab almost indefinitely, allowing scientists to produce the very large numbers of cells necessary for research and treatment. Most critically, it may be possible to engineer embryonic stem cells to create tissues that, when implanted, avoid detection and destruction by the human immune system, sparing potential recipients exposure to anti-rejection treatments. Embryonic stem cells may also reverse some medical conditions, such as diabetes, that adult stem cells may be unable to address.

Embryonic cells can come from three sources. The first source is the estimated 400,000 embryos created for in-vitro fertilization (IVF). These embryos, no more than a week old, were made for prospective parents who could not, or chose not, to conceive children otherwise. Doctors conducting assisted reproduction usually create more embryos than needed for an implant. Having additional embryos in storage allows a woman to have future implants without the burden of additional medical treatments.

The excess embryos are kept frozen in storage, awaiting the donor's decision. Will the donors use their embryos to conceive children? If the donors decide not to use the embryos, will they become available for donation to other prospective parents? Will the embryos be abandoned or allowed to deteriorate in storage? Will donors ask that the embryos be destroyed? If donors consent to give their embryos to science, researchers

extract the stem cells for use in their work. The stem cells can also generate embryonic stem cell lines. These stem cell lines are the second potential source of embryonic research stem cells.

Leftover IVF embryos are not the ideal and ready source of research stem cells that they may appear to be. A small number of embryos will be donated for use by other women. Other embryos will deteriorate in storage. Of those donated for research, donor consent is required, which may be difficult to obtain.

IVF embryos also come from people who choose not to or cannot conceive children by other means and who can access funding to cover the high cost of the process. The genetic make-up of IVF embryos, therefore, is restricted by economic considerations. It is possible that IVF embryos cannot reliably generate the diverse genetic materials and ideal tissue matches necessary for universal availability of implant tissue.

Frozen embryos can also deteriorate over time or degrade when thawed; either occurrence renders the embryos useless. Because scientists must destroy or tamper with the embryo in order to gather the stem cells, embryonic stem cell research arouses the opposition of some religious leaders.

Somatic Cell Nuclear Transfer

In an effort to generate an ideal tissue match, researchers are attempting to use a third method to obtain stem cells—therapeutic cloning, or somatic cell nuclear transfer (SCNT). Where IVF uses an embryo created by a human sperm and egg, no sperm are needed for SCNT. In SCNT, scientists remove the nucleus of an unfertilized human egg and replace the egg's nucleus with DNA from the recipient. The result is a clonote. In the lab, the clonote divides for five to seven days until becoming a blastocyst. Scientists remove a core of embryonic stem cells from the blastocyst and place the cells into a culture dish where they may develop into a stem cell line. Unlike a typical organ transplant, it is expected that SCNT will not have the rejection potential of other stem cells; it will return the donor's genetic materials.

It is important to note that those advocating for stem cell research harbor no intention to abuse this technology to create new human beings. Stem cell research solely seeks to bring cures and treatments in order to alleviate human suffering, and may also assist in furthering the understanding of disease processes.

The Future of Stem Cell Research

Among other things, stem cell researchers seek to:

- Make specific cells out of generic embryonic stem cells. They need to learn if there is a hormone, chemical or other treatment that makes skin, heart or other human cell types from stem cells.

- Ensure stem cells *stop* replicating so they do not consume the human body, as would a cancer.
- Sustain functioning of stem cell tissue implants.
- Prevent the human body from rejecting a stem cell implant as it would reject a transplanted organ.
- Address the potentially significant medical and ethical issues surrounding human egg donation.
- Increase storage of umbilical cord blood.

In an effort to reach a political and religious compromise, some people wish to limit stem cell research to adult stem cells and cord blood. However, there are serious scientific, ethical, religious and practical considerations to such restrictions.

From the perspective of science, adult stem cell research has proven successful with bone marrow transplants and in some animal trials. However, certain ailments may not find a cure through adult stem cell research. And adult stem cell products, implanted in anyone but their donor, will likely require a lifelong commitment to anti-rejection medications.

Ethically, the urgent and pressing need to explore all avenues with potential for healing—some that will prove ineffective and others that may be useful—indicates that science must move ahead immediately, in multiple directions, to determine which possibilities are most promising. From a religious perspective, many faiths see a higher mandate to move forward with embryonic stem cell research.

The progress of stem cell research also has significant political ramifications. Many countries are working on embryonic stem cell research. When their efforts are successful, will the United States find itself left out?

While the hope is that stem cell research can produce implantation tissues for people in need, researchers believe that stem cell products may serve other critical uses as well. For instance, stem cell research may reveal how certain diseases begin. It may also produce tissues that can be used to test new medicines, sparing researchers the additional challenges of conducting human and animal trials.

Efforts to increase umbilical cord blood storage are important, but cannot substitute for embryonic stem cell research or SCNT.

Resources

For additional information, see:

Stem Cell Basics, National Institutes of Health, www.stemcells.nih.gov/basics, 2005.

Stem Cell Research: What You Need to Know, The Stem Cell Action Network, www.stemcellaction.org

Chapter 2: The Ethics of Stem Cell Research

Bio-medical ethicists typically judge a proposal, such as stem cell research, in accordance with five standards:

- Beneficence: Will it bring good?
- Non-maleficence: Will it cause any harm?
- Justice: Is it equitable?
- Patient autonomy: Does it honor the patient's privacy and personal right to decide?
- Physician integrity: Does it uphold the standing of the medical profession?

Beneficence

Beneficence refers to the duty to heal and the responsibility to bring the greatest good to the greatest number. It highlights pain minimization and the pursuit of all reasonable avenues in order to provide maximum prevention, healing and comfort. Beneficence also implies the responsibility to explore healing possibilities through innovative research. Under the standard of beneficence, stem cell research may lead to advancement in critical areas of care and enable healthcare providers to offer new and effective means of healing.

Non-maleficence

Non-maleficence is often taken to mean doing no harm, or at the very least, the obligation to cause as little harm as possible.

Some sources cite concerns about harm done to the embryo and/or the unfertilized egg when engaging in stem cell research. However, as outlined in the United States Supreme Court decision *Roe v. Wade* as well as the teachings of a wide spectrum of religious leaders, the unimplanted embryo and the egg are not people and as such, lack any entitlement to the rights and protections that a living person would receive. In weighing the potential damage to the embryo against the potential benefits of stem cell research, there is a balance between beneficence (helping the sick) and non-maleficence (doing the embryo little or no harm). As the discussion of religious perspectives in Chapter 4 will indicate, the higher moral calling involves utilizing the unneeded human embryo to possibly benefit actual living people facing life-threatening and life-altering medical conditions.

At worst, stem cell research can achieve a double effect, a secondary negative consequence of a fundamentally positive action. If science destroys an embryo in an attempt to save a human life, researchers destroy the *potential* for life in order to

achieve the higher goal of preserving someone who is *actually* alive, but suffering from hardship. The destruction of the embryo would thus be considered an acceptable secondary effect, as the originating action is inherently positive.

Patient Autonomy

Patient autonomy refers to the individual's responsibility to weigh the potential risks and benefits of a medical treatment. Autonomy relies upon the patient's understanding of the medical situation, available treatments and likely consequences of taking no action.

While a healthcare provider should offer appropriate options, and possibly make a recommendation, it is for the individual to consent to, or to forgo, a course of medical action. Autonomy points to the exercise of informed decision, of the patient's moral agency, the ability to comprehend the nature of a medical situation and exercise a personal decision.

Autonomy would imply that an individual determines the disposition of a donated embryo. And, under autonomy, an individual has the right to accept or reject a stem cell implant, if available. Under the principle of autonomy, no religious leader or elected official has the right to interfere with the medical decisions of another person; a patient should be given unimpeded access to the resources that may become available through stem cell research. And a competent individual should have the right to cite a religious reason to forgo a stem cell implant, as we see, for example, among some who refuse blood transfusions for religious reasons.

Opponents of stem cell research may argue that an embryo should be treated like a person. They will likely maintain that an embryo, though lacking sentience, should have the same rights and protection as a living, sentient and autonomous human being. This religious elevation of an embryo to personhood contravenes the decision in *Roe v. Wade*, many state and federal laws, as well as the many religious teachings that do not extend personhood to the fetus or to the embryo.

Even some nationally recognized abortion opponents maintain that the picture changes when there is no intention to implant the embryo and the embryo has no chance of becoming a human being. The moral high road is to use these unneeded embryos, which would otherwise be destroyed or left to deteriorate in frozen storage, for embryonic stem cell research.

Justice

In an ideal medical system, every person has the ability to receive the same high level of medical attention. A question of justice arises when poor people do not receive medical care comparable to the care of those who are materially better off. As stem cell

research moves ahead, there is a fear that only the wealthy stand to benefit. Appropriate federal regulation would address concerns of distributive justice.

Another question of justice arises with somatic cell nuclear transfer (SCNT). SCNT utilizes donated eggs, which elicits the concern that women will be coerced to accept the medical risks of egg donation. Negative outcomes of egg donation are rare, but potentially serious, including an increase in the risk of cancer, blood clots and death. Additionally, some women receive offers of compensation for their egg donation. Will poorer women, in need of cash to pay the rent, for instance, make ready targets for economic exploitation?

Stem cell research requires tissues from hugely diverse racial groups. By relying on women who are willing to sell their eggs, or relying on those materials from people who have the ability to cover the costs of in-vitro fertilization (IVF), there is a fear that some economic, ethnic or racial groups will be left out. Appropriate regulation can address these justice concerns.

Physician Integrity

Physician integrity includes honoring a patient's right to privacy. When it comes to the disclosure of confidential information—Who is the donor? Who is the recipient? What information about donors of genetic material should be made available? What utilization limits, if any, might a donor stipulate? Adequate privacy guidelines should prevail.

Physician integrity also speaks to the physician's primary obligation to the presenting patient. If a conflict arises between the patient and third parties (religious leaders, the embryo or the fetus), the physician's duty to the patient comes first.

Resources

For additional information, see:

Principles of Biomedical Ethics, Tom L. Beauchamp and James F. Childress, Fifth Edition, Oxford University Press, 2001.

Chapter 3: The Politics of Stem Cell Research

Stem cell research, with its use of human reproductive tissues, arouses much political discussion and debate. Some political groups and leaders, with or without religious support, attribute personhood to the fetus and embryo. Just as they stand firmly against abortion, they oppose embryonic stem cell research and somatic cell nuclear transfer (SCNT). For instance, the United States Conference of Catholic Bishops and the National Right to Life Committee, already outspoken on the status of the fetus, seek to protect embryos from researchers. Other research opponents confuse reproductive cloning (cloning a human being) with therapeutic cloning (stem cell research seeking to address medical conditions) and harbor the far-fetched fear that human cloning is on the horizon of stem cell research. A survey of stem cell research regulation and legislation concludes that there will be serious consequences for anyone taking stem cell research down the slippery slope leading to human cloning.

Support for stem cell research comes from a variety of groups. Groups such as the Juvenile Diabetes Research Foundation and the Christopher Reeve Paralysis Foundation support stem cell research, with hope to address the conditions that afflict themselves and those they love. Medical researchers, including the Coalition for the Advancement of Medical Research and biotech companies, seek the healing that stem cells may offer. Additionally, public officials express concern about falling behind other countries in the race to find, and profit from, cures to disease and medical innovation. As such, it is clear that there is significant support for stem cell research initiatives in the United States.

In an effort to balance the pressing need for embryonic stem cell research with the outspoken opposition, President Bush authorized federal funding for embryonic stem cell research, but only for stem cell lines created before August 9, 2001; there would be no federal funding to create any new stem cell lines. The directives allow privately funded embryonic stem cell research, except in states where it is outlawed.

It is now apparent that the President's effort is grossly insufficient. The number of approved lines is inadequate and the majority of these stem cell lines are not usable. Bipartisan groups of House and Senate members—ranging from Senator Orrin Hatch to Senator Hillary Clinton—have urged President Bush to relax research restrictions. Senator Hatch, a longstanding abortion opponent, distinguishes between the moral status of an unimplanted human embryo in the freezer and the moral status of an existing pregnancy in the womb.

In July 2006, President Bush vetoed legislation that would expand federal support for embryonic stem cell research. The legislation, which passed the House of Representatives in 2005, created an opportunity for individuals to donate unused embryos to researchers. While the legislation received significant bi-partisan support,

President Bush cited moral boundaries as the rationale for his decision. This was his first use of executive veto power since taking office in 2001.

In the absence of reasonable federal direction, some states are taking the initiative to support stem cell research while others are contemplating action. Massachusetts, California and New Jersey, while banning reproductive cloning, specifically authorize therapeutic cloning. Other states, including New York, Illinois, Connecticut, Maryland, Minnesota, Pennsylvania, Rhode Island, Tennessee and Washington are considering similar bills. These legislative initiatives typically prohibit reproductive cloning and impose harsh penalties for those entertaining the idea of human cloning. Efforts by the states can prove critical, but federal stem cell research guidelines are still necessary to standardize policies, procedures and oversight. Federal involvement would also spare each state the responsibility of developing individualized rules and guidelines, therefore leading to efficient use of time and resources.

In cooperation with the private sector, New Jersey established the \$50 million New Jersey Stem Cell Research Institute. California voters recently authorized a \$3.3 billion bond for stem cell research. Massachusetts also passed an initiative in 2005.

In March, 2004, Canada adopted the Assisted Human Reproductive Act. The Act permits embryonic stem cell research using leftover in-vitro fertilization (IVF) embryos, but banned therapeutic and reproductive cloning. It also launched a federal agency responsible for licensing and monitoring all human embryo research.

The United Kingdom's Human Fertilisation and Embryology Authority, established in 1991, licenses and monitors all human embryo research in the UK; researchers must account for every single embryo. The Authority has granted a research cloning license to Newcastle University. In Japan, reproductive cloning is a criminal offense, punishable by up to 10 years in prison. But, Japan will permit therapeutic cloning once strict rules and rigorous oversight are in place.

Reports of breakthrough work in South Korea, including the creation of patient-specific stem cell lines, have since been retracted.

Resources

For additional information, see:

The International Stem Cell Forum, www.stemcellforum.org, 2006.

The Coalition for the Advancement of Medical Research, www.camradvocacy.org, 2006.

Chapter 4: Religious Perspectives on Stem Cell Research

Religious Groups Support Stem Cell Research

A number of religious organizations strongly support stem cell research, including embryonic stem cell research and somatic cell nuclear transfer (SCNT). Many denominations point to their teachings on the beginning of life—the status of the embryo and the fetus—and see the moral high ground in turning to stem cell research in order to address the compelling needs of individuals facing life-threatening and life-altering conditions. The moral status of the human embryo is subordinate to the moral status of a living human being who may one-day benefit from embryonic cell research.

As in the abortion debate, some faith leaders assert that personhood begins at fertilization. They define a fertilized human egg as the equal of a living human being, deserving the same legal protections and rights. In contrast, many other faiths believe personhood arrives much later in fetal development. They maintain that human embryos, though worthy of responsible treatment, do not have the status of human beings. These religious groups, motivated by the potential for healing, are passionate supporters of embryonic stem cell research.

Religious leaders base their support on a number of arguments:

- ***The duty to provide healing and the right to benefit from the healing powers of medical science.*** Religious teachings call for a compassionate and speedy response to suffering. Many typically view the physician as God’s agent in bringing comfort and healing. They point to the religious responsibility of the scientific community and medical profession to fulfill the pressing obligations to reduce human hardship.
- ***The obligation to pursue scientific inquiry.*** Some faiths emphasize the human ability to inquire and discover and to use the fruits of that intellectual effort to improve the human condition. They believe that the Revelation of God’s word continues as science advances.
- ***Embryos may become human beings, but they are not human.*** Many religious leaders recognize the potential for life that the embryo represents. At the same time, these leaders believe that the embryo is not the equivalent of a human, and is thus ineligible for the protections that a person would enjoy. They conclude that the higher duty is to utilize the embryo to address the life-threatening conditions of living people.
- ***The embryo is under the jurisdiction of the woman.*** Consistent with the ethical argument for autonomy, supportive religious leaders believe that it is up to the individual to determine if an embryo can be used for research.

A Summary of Selected Religious Perspectives

Christian Perspectives

The Rev. Tom Davis offers a Christian argument in his book *Sacred Work: Planned Parenthood and its Clergy Alliances*. Rev. Davis believes that theological considerations should not block scientific research. He sides with a faith-based imperative to ameliorate human suffering by moving with vigor to advance work with stem cells. Rev. Davis accepts the reality that few remaining embryos, if any, will ever be implanted in women; most will be slated for destruction. Recognizing the ocean of hardship that might be relieved through embryonic stem cell research, Rev. Davis cites a resolution adopted by the General Synod of the United Church of Christ in the summer of 2001. The statement recognizes that, “Jesus set an example by his ministry, of healing and caring for the sick and disabled, challenging us to follow his example . . . Whereas, many scientists believe that embryonic stem cell research could relieve suffering and possibly cure patients . . . the United Church of Christ supports federally-funded embryonic stem cell research within ethically sound guidelines.”

The Rev. Dr. Paula Gravelle, former director of Concerned Clergy for Choice and director of pastoral care at Ellis Hospital in Schenectady, New York, points to Scripture to support the imperative to address the pressing need to relieve suffering. She cites Matthew 25: 35-40, “for I was hungry and you gave me food . . . thirsty and you gave me something to drink . . . a stranger and you welcomed me . . . naked and you gave me clothing . . . sick and you took care of me . . . Truly I tell you; just as you did one of the least of these . . . you did it to me.” Reflecting on her experience as a pastoral care provider, she continues, “I have watched as a woman with tears running down her face feeds her husband who no longer knows who she is. I have wrapped in my arms the parents of a child, who lay dying because of juvenile diabetes, and I have watched a once vibrant leader of my congregation fall into silence as Parkinson’s overtook his body. There is not a blastocyst in a Petrie dish anywhere that should have more value than these living, breathing human beings.”

Jewish Perspectives

Leaders from all four major Jewish denominations—Orthodox, Reconstructionist, Conservative and Reform Judaism—have endorsed embryonic stem cell research. Some Jewish religious leaders have also endorsed SCNT.

Jewish arguments rely upon biblical teaching interpreted by later rabbinic sources and affirmed by current national resolutions and statements. Support for stem cell research rises from Jewish attitudes toward the status and treatment of the embryo and the mandate to protect and preserve human life in the face of suffering.

Most Jewish sources agree that the responsibility to the suffering person outweighs the responsibility to the embryo. While a fetus has the potential to become life and should not be subject to cavalier treatment, the fetus should not enjoy the full status and full legal protections of a person. To the point of discussion for embryonic stem cell research, the legal status of an embryo does not even rise to the status of a fetus.

When considering the ravages of conditions such as Parkinson's disease and juvenile diabetes, the Rabbinical Assembly of Conservative Judaism affirmed support of embryonic stem cell research in 2003, calling its members to "publicly advocate for the use of human embryonic . . . stem cell research" as an "act of *hesed* (compassion) which may lead to the *mitzvah* of *pikuah nefesh* (saving of life)."

On July 26, 2001, the Union of Orthodox Congregations of America and the Rabbinical Council of America, leaders of Orthodox Judaism, expressed "support for federal funding for embryonic stem cell research" because of the "great life-saving potential" in an open letter to President Bush. Returning to the traditional Jewish teachings, the rabbis observed that the "isolated fertilized egg does not enjoy the full status of personhood and its attendant protections." The embryo is deserving of respect, but the need to bring healing must take priority.

In 2003, the Union for Reform Judaism (URJ) called for "research using both adult and embryonic stem cells, in addition to the existing lines currently approved for funding by the United States and Canadian governments." The URJ supported SCNT while firmly opposing "efforts to restrict or penalize scientists, clinicians, or patients for participating in stem cell research and SCNT technology for therapeutic purposes."

Unitarian Universalist (UUA)

The Rev. William G. Sinkford, President of the Unitarian Universalist Association of Congregations, endorsed embryonic stem cell research in a statement issued on November 14, 2001. Rev. Sinkford stresses the longstanding Unitarian Universalist commitment to uphold the right of the individual to make personal choices in all areas, including reproduction; a woman has the right to decide the disposition of her embryos. He also emphasizes scientific inquiry as an active avowal of the Unitarian Universalist's social responsibility. After considering the possibility of curing terrible human medical conditions, he concludes that "as a compassionate faith, we should welcome the development of this infant science" of stem cell research. Because "I do not consider human embryos to be people, and because Unitarian Universalists insist that reproduction is a personal and private matter, I believe that there should be no ban on embryonic stem cell research."

However, Rev. Sinkford calls for “careful and continual scrutiny” of the research. He maintains, “[N]o human embryos should be created specifically for stem cell experimentation.” And to the current political debate, he adds, “I regret that the President has limited his support to the use of so-called stem cell ‘lines’ that might confine this entire field of scientific research”

Chapter 5: Clergy as Stem Cell Research Advocates

Clergy can offer an important and unique contribution to the advocacy efforts for stem cell research. Clergy are the only ones who can take a religious perspective and steer the stem cell research debate away from issues relating to abortion, the fetus and even the embryo.

As pastoral care providers, clergy can point to the urgent and compelling needs of the afflicted, citing first-hand experience with the specific struggles and heartbreak endured by those seeking cures and relief from the conditions that stem cell research may one day address. By placing a human face on the suffering, clergy offer an important counter argument to the obtuse and theoretical arguments about the status of the embryo. Also, they can cite traditional faith teachings and recent national and international resolutions on the subordinate status of the embryo and the need to expand the fund of human scientific knowledge.

Clergy have a number of ready venues for stem cell research advocacy:

- Church and synagogue newsletter articles
- Sermons
- Letters to the editor
- Contacting elected officials
- Sponsoring speakers and educational forums in houses of worship
- Programs in partnership with local Planned Parenthood chapters
- Publication in the religious sections of newspapers and magazines
- Offering testimony at public hearings
- Speaking at public sessions that inform popular opinion

The appendices that follow can help clergy in speaking about stem cell research. Appendix A, “In Your Community: Education and Advocacy Tools,” provides outlines for lectures and the pulpit. Used in conjunction with this toolkit, the outlines offer a framework for presentation. Appendix A also contains talking points that can be incorporated into presentations, work with the media or communication with policy makers.

Appendix B, “Policy Statements by Health Organizations,” contains medical and professional opinion statements from a variety of health organizations.

Appendix C, “Policy Statements by Religious Groups,” cites endorsements from a variety of religious leaders and organizations.

Appendix D, “Resources,” showcases a comprehensive list of resources noted in this publication as well as additional supplements.

Appendix A: In Your Community: Education and Advocacy Tools

In Your Community: Goals and Objectives for Pulpit and Classroom

Goal: Listener will be able to articulate the religious arguments for stem cell research.

Objective: Listener will be able to identify and explain:

What are stem cells?

What do stem cell researchers do?

How do researchers gather stem cells?

What is the difference between therapeutic and reproductive cloning?

What conditions may stem cell research ameliorate and how?

What is the status of federal, state, and international stem cell research efforts?

What ethical concerns surround stem cell research?

What is the difference between commercial and state-sponsored research?

What is the relationship between abortion and stem cell research?

How do various faiths endorse stem cell research?

Resources for Pulpit and Classroom

- PowerPoint presentation on Stem Cell Research (From Stem Cell Action Network, or Concerned Clergy for Choice)
- The status of state, federal, international and commercial efforts
- Denominational stances on stem cell research
- Pastoral care stories highlighting potential beneficiaries of stem cell research

Stem Cell Research: Religious Perspectives

- What does stem cell research address?
- What are stem cells?
- What does stem cell research need in order to grow?
- Where do research stem cells come from?
 - Adult Stem Cells: Multipotent
 - Embryonic Stem Cells: Pluripotent
 - Therapeutic Cloning: Somatic Cell Nuclear Transfer (SCNT)
 - Clonote
 - Blastocyst
 - Reproductive Cloning
 - Existing Stem Cell Lines
 - Other Sources
- Political and Economic Concerns
 - Federal
 - State
 - International
- Religious and Ethical Perspectives
 - The mandates to expand the fund of human knowledge
 - The mandate to provide healing
 - The right to benefit from the healing powers of medical science
 - The subordinate status of the embryo
 - The human soul is inviolate
 - The purported relationship to abortion
 - The need for federal oversight
 - The consequences of foisting a particular religious perspective on all people

In Your Community: *Talking Points for Use with Media and Policy Makers*

- The need to discover new technologies for healing takes priority over protecting an embryo that will deteriorate in storage or be destroyed.
- The fund of human knowledge must increase through scientific inquiry.
- The status of the embryo is subordinate to the needs of a living person.
- With thousands of embryos in storage likely to deteriorate or be destroyed, the higher calling is to allow people the opportunity to provide informed consent and donate their unused embryos for stem cell research.
- People have the right to benefit from the healing powers of medical science.
- No religious group should stand in the way of healing the sick. In a religious pluralism like the United States, no faith has the right to interfere with the healthcare of people who follow other religious teachings.
- People have the right to refuse medical treatment. No one may force anyone else to accept therapy based in stem cell research if it goes against his or her religious belief or conscience.
- Many religious denominations support stem cell research, despite the lack of attention this support receives in the media. Religious leaders from all three major western faiths (Islam, Christianity and Judaism) and all four major Jewish denominations (Orthodoxy, Reform, Conservative and Reconstructionism) support embryonic stem cell research for the life saving potential it carries.
- The United States needs to maintain its position as a leader in science. We should not voluntarily outsource the next generation of healing.

In Your Community: Talking Points on Federal Oversight

Federal oversight provides the opportunity to:

- Ensure that all people, of all races and economic levels, have equal access to the healing potential of stem cell research.
- Ensure the utilization of a diverse supply of genetic materials for research and implantation across racial, ethnic and economic groups through federal guidelines mandating such supplies.
- Prioritize various conditions, such as Parkinson's disease, juvenile diabetes, and other life-threatening conditions, while classifying other conditions, such as elective cosmetic needs, as secondary.
- Ban reproductive cloning.
- Ensure that women in financial need are not exploited for their eggs.
- Track the utilization of each embryo in order to honor a public trust and the trust of those who donate research tissues.
- Ensure that people who choose to donate their embryos or eggs have the right to do so, without interference from religious or political leaders, and that science has the freedom to accept and utilize these materials.
- Ensure that religious leaders who would thwart stem cell research do not deny others the hope of healing and comfort, nor do they impose their beliefs surrounding sexuality onto people of differing faiths or onto society as a whole.
- Prevent fraud.
- Assure that the United States remains a world leader in the field of healthcare and scientific research.

In Your Community: Selections for Sample Print Media Work

“As a religious leader, I want to address the common and mistaken impression that people of faith oppose stem cell research. In fact, many Christians, Unitarians, Muslims and Jews support embryonic stem cell research.”

“Clergy devote countless hours to caring for people suffering from the very conditions—Parkinson’s disease, juvenile diabetes, spinal cord injury, and more—that stem cell research seeks to address. We know, first hand, the magnitude of human suffering and the cry for healing and comfort. Let me add my voice, as a member of clergy, to those who believe that embryonic stem cell research must move forward.”

“Leaders of all four major denominations of Judaism—Orthodox, Conservative, Reform and Reconstructionist—support embryonic stem cell research. When considering the status of the embryo and the needs of those who seek healing, Jewish religious leaders strongly endorse the responsibility to turn to embryonic stem cell research. We pray that stem cell research will bring full and speedy healing to those in need.”

“When discussing embryonic stem cell research, different faiths have different opinions. In a religious pluralism like the United States, no one faith has the right to impose its restrictions on people who follow other faith teachings or on society as a whole. The United States’ healthcare policy must not be commandeered by its religious minority.”

“The United States of America can be proud of its history of serving as a world leader by offering its citizens advanced healthcare. The innovation in healthcare should continue as a matter of national honor and public trust.”

“The embryo is secondary to the needs of thinking, feeling people who suffer from life-threatening and life-altering medical conditions. My faith indicates that we must put hope and healing first.”

“Embryonic stem cell research has nothing to do with abortion. No one is pregnant. No one will become pregnant. There is no fetus. Stem cell research deals with an unimplanted embryo that will either deteriorate in storage or be destroyed. This embryo is less than a week old and will not become a fetus or a baby. This research has nothing to do with the termination of a pregnancy.”

Appendix B: Policy Statements by Health Organizations

Medical Organizations

American Medical Association (AMA)¹

“Our AMA: (1) supports biomedical research on multipotent stem cells (including adult and cord blood stem cells); (2) supports the use of somatic cell nuclear transfer technology in biomedical research (therapeutic cloning); (3) opposes the use of somatic cell nuclear transfer technology for the specific purpose of producing a human child (reproductive cloning); (4) encourages strong public support of federal funding for research involving human pluripotent stem cells; and (5) will continue to monitor developments in stem cell research and the use of somatic cell nuclear transfer technology.”

The American College of Obstetricians and Gynecologists (ACOG)²

“The American College of Obstetricians and Gynecologists (ACOG), representing over 40,000 physicians providing healthcare to women, today announced its strong support for the Human Cloning Ban and Stem Cell Research Protection Act of 2003. Introduced by Senators Orrin Hatch (R-UT), Dianne Feinstein (D-CA), Arlen Specter (R-PA), Edward Kennedy (D-MA), and Tom Harkin (D-IA), this legislation promotes research in somatic cell nuclear transfer (SCNT), also referred to as therapeutic cloning, while prohibiting human reproductive cloning.

“ACOG recognizes that stem cell research is critical in the fight to advance science. SCNT shows tremendous promise and has the potential to improve the lives of millions who suffer from conditions such as diabetes, osteoporosis, heart disease, and cancer. This research may also lead to medical breakthroughs including improved treatments for spinal-cord injuries and degenerative conditions including Alzheimer's and Parkinson's diseases.

“The Human Cloning Ban and Stem Cell Research Protection Act of 2003 would strictly prohibit any attempt at human reproductive cloning, a controversial procedure that ACOG believes is both unsafe and unethical. ACOG stands firm in supporting legislation that would ban the cloning of embryos for the purpose of producing a child. Restrictions on scientific research for therapeutic purposes, however, would close the door on medical advancements that could save lives, enhance quality of life, and alleviate suffering. ACOG endorses this legislation

¹ H-460.915 Cloning and Stem Cell Research.

² *Statement of The American College of Obstetricians and Gynecologists on the "Human Cloning Ban and Stem Cell Research Protection Act of 2003,"* The American College of Obstetricians and Gynecologists, www.acog.org/from_home/publications/press_releases/nr02-05-03.cfm, 2 February 2003.

because it guarantees rigorous oversight of this research, ensuring adherence to strict regulatory guidelines.

“ACOG is committed to the highest quality patient care. As physicians who provide healthcare to women, we strongly support research in SCNT and stem cell technology and urge Congress to enact this important legislation.”

Health Advocacy Organizations

American Diabetes Association (ADA)

“The American Diabetes Association today strongly expressed its support for federal legislation that would accelerate stem cell research by easing existing restrictions and supporting research that uses embryonic stem cells.³”

“With restrictions on federal funding of some stem cell research, states are now the focus of the debate. State laws, perspectives and approaches vary widely. The American Diabetes Association supports somatic cell nuclear transfer (SCNT), also known as therapeutic cloning, but strongly opposes all forms of reproductive cloning and supports legislation to ban such activities. This is in line with most scientific and voluntary health organizations.

“SCNT holds a great deal of promise for finding potential cures for many diseases, including diabetes. SCNT is the transplanting of a patient’s DNA into an unfertilized egg in order to grow stem cells that could cure devastating diseases. The promise of SCNT is that the patient’s body would accept these cells after transplantation. SCNT produces stem cells. There is no sperm used in this procedure. The cells are not transplanted into a womb. Instead, cells are isolated to make stem cells for further study and clinical applications.

“Stem cells derived from patients with inheritable risk factors that contribute to their disease will allow, for the first time, many new avenues of research to help scientists understand and develop therapies for their diseases. SCNT aims to treat or cure patients by creating tailor-made, genetically identical cells that their bodies won’t reject. In other words, SCNT could allow patients to be cured using their own DNA.⁴”

³ *Embryonic Stem Cell Legislation Holds Promise for 18.2 Million Americans with Diabetes*, American Diabetes Association, <http://www.diabetes.org/for-media/2005-press-releases/stem-cell-legislation.jsp>, 23 May 2005.

⁴ *Stem Cell Research*, American Diabetes Association, <http://www.diabetes.org/advocacy-and-legalresources/state-legislation/stemcell.jsp>, 2006.

Christopher Reeve Paralysis Foundation (CRPF)⁵

“Given the scientific and medical benefits that will likely accrue, the Christopher Reeve Paralysis Foundation supports the responsible pursuit of human pluripotent stem cell research within the strict scientific and ethical framework stipulated in the National Institutes of Health Guidelines for Research Involving Human Pluripotent Stem Cells, issued August 23, 2000.

“The Christopher Reeve Paralysis Foundation⁶ supports the responsible use of nucleus transplantation for research purposes and in particular to establish new stem cell lines, given the anticipated scientific and medical benefits. However, the Foundation adamantly opposes the use of nucleus transplantation for human reproductive purposes . . . Immune rejection is a profound challenge in human embryonic stem cell transplantation . . . Nucleus transplantation offers a viable way around this challenge because it can produce stem cells with genetic material identical to that of the patient. Simply put, cells derived from one’s own tissues are less likely to be rejected . . . provides us with unique opportunities to develop effective treatments for a wide variety of currently incurable diseases and disorders. It is also a powerful tool of modern forensic science, vaccine development and drug discovery and testing.”

The Coalition for the Advancement of Medical Research (CAMR)⁷

“The Promise of Embryonic Stem Cells

- These cells could be the “missing link” needed to cure some of the world’s most deadly diseases.
- Scientists already have shown they can direct the development of human embryonic cells into insulin-producing cells that might help cure juvenile diabetes.
- Up to 100 million Americans may benefit from this research.

“Embryonic Stem Cells v. Adult Stem Cells

- Most scientists believe and studies show that embryonic stem cells will likely be more effective in curing diseases because they can grow and differentiate into any of the body’s cells and tissues and thus into different organs.
- CAMR supports research involving both adult and embryonic stem cells.

“Excess Fertilized Eggs Are Available For Research

⁵ *Position Statement on Federal Funding of Human Embryonic Stem Cell Research*, Christopher Reeve Paralysis Foundation,

www.christopherreeve.org/site/c.geIMLP0pGjF/b.1038451/apps/s/content.asp?ct=1491837, 2005.

⁶ *Position Statement on Nucleus Transplantation*, Christopher Reeve Paralysis Foundation, 2 January 2002.

⁷ *Embryonic Stem Cell Research Fact Sheet*, The Coalition for the Advancement of Medical Research, camr.ctsg.com/stem_cell_main.html, March 2004.

- A majority of couples want to help save lives.
- Stem cells come from excess fertilized eggs stored in freezers at in-vitro fertility (IVF) clinics.
- There are tens of thousands of these fertilized eggs available for research.
- Nearly half of infertile couples say they would like to see some good come from their excess eggs.

“Federal Funding of the Research Protects the Public Interest

- Private funding means research without federal oversight.
- Without federal funding, the nation’s top academic researchers at universities, medical schools and teaching hospitals cannot join in the search for cures, which means much slower progress.
- Tax dollars keep the “public” in public interest. This research should not be confined to the for-profit, commercial sector.
- The government should be providing oversight of the work and ensuring that the research complies with ethical guidelines.

“State Legislative Initiatives

- State governments are promoting safe-havens for stem cell and therapeutic cloning research.
- CAMR supports state efforts to create safe-havens for critical medical research such as stem cells and therapeutic cloning, but it is no substitute for a supportive federal policy.
- State legislation that is pro-stem cell and therapeutic cloning research helps attract top scientists/researchers to pursue this field of study and increases research activity.
- Increased research activity helps bring us closer to scientific advances that could lead to cures.
- State legislation that encourages IVF clinics to inform patients of their option to donate excess fertilized eggs for research helps increase the supply of material available for research. This in turn helps increase the genetic diversity of new stem cell lines that could be developed.
- State governments that pass anti-stem cell and therapeutic cloning legislation, such as Iowa, force researchers to flee to states like California and New Jersey, which provide funding and positive research environments.
- Broadly-worded state bans on all human cloning will only stop important research and possible cures.

“Public Opinion Strongly Favors Embryonic Stem Cell Research

- The majority of Americans (regardless of religious or political affiliation) support embryonic stem cell research.
- The American people want embryonic stem cell research to move forward.
- Members of Congress from both sides of the political aisle support the research. In May 2005, the House of Representatives passed HR 810, the

Stem Cell Research Enhancement Act. The bill is currently pending in the Senate.⁸

- Independent opinion surveys over the last three years consistently show strong public support for embryonic stem cell research (*USA Today*, Gallup, Pew Research Center, ABC News, CAMR, and others).
- There is surprisingly strong backing among fundamentalist Christians, Catholics and abortion opponents.
- Hundreds of newspapers throughout the country have editorialized in favor of the research.”

Juvenile Diabetes Research Foundation (JDRF)⁹

“[R]esearch progress in the United States with human embryonic stem cells has been disappointing at best . . . slowed by political issues, ethical debate funding considerations, intellectual property concerns, and difficulty in recruiting scientists to the field . . . The key to realizing the promise of the Administration’s policy is to relax the guideline on using only embryonic stem cells lines derived before August 9, 2001.”

Parkinson’s Disease Foundation (PDF)¹⁰

“President Bush’s decision to allow federal funding for research on existing stem cell lines is a welcome first step towards realizing the full promise and potential of embryonic stem cell research . . . WE are concerned, however, that the limitations the President has placed on the federal funding means that the research will proceed a small step at a time when great strides are needed. The number, quality, diversity and availability of existing cell lines are all key questions that must be answered before the adequacy of the President’s plan can be assessed.”

⁸ The Stem Cell Research Enhancement Act passed the US Senate on 18 July 2006. It was vetoed by President Bush on 19 July 2006. The House of Representatives was unable to override the veto with a vote of 235-193, falling short of the necessary two-thirds majority by 51 votes.

⁹ *Embryonic Stem Cells*, Juvenile Diabetes Research Foundation, September 2003.

¹⁰ *Joint Statement on President Bush’s Decision*, Parkinson’s Disease Foundation, www.pdf.org/News/news.cfm?year=2001&type=1, 10 August 2001.

Appendix C: Policy Statements by Religious Groups

Christian Groups

Episcopal Church, USA (ECUSA)¹¹

“*Resolved*, That the 74th General Convention of The Episcopal Church, believing that a wider availability of embryonic stem cells for medical research holds the potential for discovery of effective treatment of a wide variety of diseases and other medical conditions;

- A. Support the choice of those who wish to donate their early embryos, remaining after in vitro fertilization (IVF) procedures have ended; and
- B. Urge that the United States Congress pass legislation that would authorize federal funding for IVF and remain after fertilization procedures have been concluded, provided that:
 - 1. These early embryos are no longer required for procreation by those donating them and would simply be discarded;
 - 2. Those donating early embryos have given their prior informed consent to their use in stem cell research;
 - 3. The embryos were not deliberately created for research purposes;
 - 4. The embryos were not obtained by sale or purchase; and be it further

“*Resolved*, That the 74th General Convention of The Episcopal Church urge the Secretary of Health and Human Services to establish an interdisciplinary oversight body for all research in both the public and private sectors that involves stem cells from human embryos, parthenotes, sperm cells, or egg cells, and have this body in place within six months of passing such legislation; and be it further

“*Resolved*, That the 74th General Convention of The Episcopal Church direct the Secretary of General Convention to communicate this resolution to appropriate members and committees of the United States Congress and direct the Office of Government Relations to identify and advocate the legislation called for by this resolution.”

Presbyterian Church, USA (PCUSA)¹²

“Contemporary medical research and technologies have presented humankind with complex ethical and moral realities never before envisioned. These realities

¹¹ *General Convention Resolution in Support of Embryonic Stem Cell Research Resolution 2003-A014*, 74th General Convention of The Episcopal Church, www.episcopalchurch.org/3654_75220_ENG_HTM.htm, 2006.

¹² *Statement on the Ethical and Moral Implications of Stem Cell and Fetal Tissue Research*, 213th General Assembly of the Presbyterian Church USA, www.pcusa.org/ga213/business/OVT0150.htm, 2001.

bear careful review and consideration as new therapies are developed to cure diseases and illnesses. As people of faith we are called to be partners with God in healing and in the alleviation of human pain and suffering.

“Human pluripotent stem cells, more commonly known simply as stem cells, are derived through two different methods: one uses early stage embryos in excess of clinical need and donated by women undergoing in-vitro fertilization; the other method isolates stem cells from aborted fetuses. Stem cells have the ability to divide for an indefinite period in culture and can develop into most of the specialized cells and tissues of the body, such as muscle cells, nerve cells, liver cells, and blood cells. The use of stem cells has far-reaching possibilities including cell therapies. Stem cells stimulated to develop into specialized cells could be used to treat diseases such as Parkinson's, Alzheimer's, spinal cord injuries, stroke, burns, heart disease, and diabetes. Using stem cells could reduce the dependence on organ donation and transplantation....

“Research with stem cells obtained from human embryos poses moral difficulties that do not exist in the case of fetal tissues. The life of the fetus has already been terminated when the researcher receives tissue from an aborted fetus, while the life of embryonic tissue resulting from infertility treatment must be terminated. The morality of ending the life of embryos rests on how one views the moral status of the embryos. We believe, as do most authorities that have addressed the issue, that human embryos do have the potential of personhood, and as such they deserve respect. That respect must be shown by requiring that the interests or goals to be accomplished by using human embryos be compelling and unreachable by other means. Indications are that human embryonic stem cell research has the potential to lead to lifesaving breakthroughs in major diseases. Currently, this knowledge cannot be obtained from cells derived from other sources such as adult stem cells and cadaveric fetal tissue. Prohibition of the derivation of stem cells from embryos would elevate the showing of respect to human embryos above that of helping persons whose pain and suffering might be alleviated. Embryos resulting from infertility treatment to be used for such research must be limited to those embryos that do not have a chance of growing into personhood because the woman has decided to discontinue further treatments and they are not available for donation to another woman for personal or medical reasons, or because a donor is not available. Again, the sale or commercialization of embryonic tissue should be legally prohibited.

“Therefore, the 213th General Assembly (2001) of the Presbyterian Church (U.S.A.), affirms the use of fetal tissue and embryonic tissue for vital research. Our respect for life includes respect for the embryo and fetus, and we affirm that decisions about embryos and fetuses need to be made with responsibility. Therefore, we believe that the Presbyterian Church (U.S.A.) and other faith groups should educate their members in making these very difficult ethical decisions. With careful regulation, we affirm the use of human stem cell tissue for research that may result in the restoring of health to those suffering from serious

illness. We affirm our support for stem cell research, recognizing that this research moves to a new and challenging frontier. We recognize the need for continuing, informed public dialogue and equitable sharing of information of the results of stem cell research. It is only with such public dialogue and information sharing that our diverse society can build a foundation for responsible movement toward this frontier that offers enormous hope and challenge.”

United Church of Christ (UCC)¹³

“This resolution calls upon the Twenty-third General Synod of the United Church of Christ to support federally funded embryonic stem cell research. Such research may enable the development of new approaches to diagnosis, prevention, and treatment of some of our most devastating diseases such as Parkinson’s, Alzheimer’s, Juvenile Diabetes and heart disease.

“WHEREAS Jesus set an example, by his ministry of healing and caring for the sick and disabled, challenging us to follow his example by supporting the healing and caring ministry in our own day, and

“WHEREAS human embryonic stem cells can form virtually any type of human cell and thus have the potential to form tissues for any part of the body, and

“WHEREAS many scientists agree that research on embryonic stem cells is more promising than that of adult stem cells that have only a limited capability to form certain cell types, and

“WHEREAS many scientists believe that embryonic stem cell research could relieve suffering and possibly cure patients with a variety of disorders such as Alzheimer’s and Parkinson’s diseases, juvenile diabetes, spinal cord injury, Huntington’s disease and muscular dystrophy, and

“WHEREAS there are currently over 25,000 frozen embryos in IVF (in-vitro fertilization) clinics that probably will eventually be discarded, and

“WHEREAS the NIH developed guidelines regulating federally funded research on stem cells, provided they were taken from frozen human embryos derived from in-vitro fertilization and which would be discarded after the treatment of infertile couples, and

“WHEREAS in Spring 2001 the present administration canceled the inaugural meeting of a National Institutes of Health (NIH) committee that was to review the applications for federal grants to study human embryonic stem cells; and

¹³ *Support for Federally Funded Research of Embryonic Stem Cells*, United Church of Christ, www.ucc.org/synod/resolutions/res30.htm, 2001.

“WHEREAS there is bipartisan support for research using human embryos, including many Democratic and Republican legislators, and

“WHEREAS research on embryonic stem cells is already underway in privately funded laboratories where regulations and guidelines do not apply, and

“WHEREAS the support for federally funded research will impose ethical guidelines and oversight, and

“WHEREAS by banning the research, we foreclose the possibility of doing all we can to improve the lot of the living, and in many cases giving them new life,

“THEREFORE BE IT RESOLVED that the Twenty-third General Synod of the United Church of Christ supports federally-funded embryonic stem cell research within ethically sound guidelines (including concern for justice, privacy, access to the benefits of the research for all) and the limitations set forth by the National Institutes of Health, and

“BE IT FURTHER RESOLVED that the Twenty-third General Synod requests the General Minister and President of UCC to send a letter to the President of the United States urging approval of federal funding for embryonic stem cell research within NIH guidelines, and

“BE IT FURTHER RESOLVED that the Twenty-third General Synod requests Justice and Witness Ministries to advocate for allocation for stem cell research before the appropriate Congressional committees, and

“BE IT FURTHER RESOLVED that the Twenty-third General Synod requests Conferences, Association and Local Churches to work diligently in support of the legislation allowing stem cell research, providing appropriate guidelines for such research, and allocating funds to support the research, and

“BE IT FURTHER RESOLVED that the Twenty-third General Synod of the United Church of Christ calls upon the Covenanted Ministries to provide leadership and study materials for education, discussion and theological reflection about the ethical issues of developments in the field of stem cell research.”

United Methodist Church (UMC)¹⁴

“The responsibility of humankind to God's creation challenges us to deal carefully with the possibilities of genetic research and technology. We welcome the use of genetic technology for meeting fundamental human needs for health, a safe environment, and an adequate food supply.

¹⁴ *The Social Community*, United Methodist Church General Board of Church and Society, www.umc-gbcs.org/site/pp.asp?c=fsJNK0PKJrH&b=849215, 2006.

“Because of the effects of genetic technologies on all life, we call for effective guidelines and public accountability to safeguard against any action that might lead to abuse of these technologies, including political or military ends. We recognize that cautious, well-intended use of genetic technologies may sometimes lead to unanticipated harmful consequences.

“Human gene therapies that produce changes that cannot be passed to offspring (somatic therapy) should be limited to the alleviation of suffering caused by disease. Genetic therapies for eugenic choices or that produce waste embryos are deplored. Genetic data of individuals and their families should be kept secret and held in strict confidence unless confidentiality is waived by the individual or by his or her family, or unless the collection and use of genetic identification data is supported by an appropriate court order. Because its long-term effects are uncertain, we oppose genetic therapy that results in changes that can be passed to offspring (germ-line therapy).”

Muslim Groups

Islamic Free Market Institute Foundation¹⁵

“Muslims have utterly and vehemently rejected human cloning experimentation that “contradicts Islamic legislation and is prohibited in all its forms because it contradicts with Islam.” (See edict of the Mufti of Egypt on ArabicNews.com). Nevertheless, virtually all Muslim scholars see in-vitro fertilization (IVF) as a compassionate and humane scientific procedure to help infertile couples bear children. This procedure involves stimulating a woman's ovaries, removing the eggs, and fertilizing them by sperm cells from the husband in the laboratory. Days-old fertilized eggs (embryos) are implanted in the woman's uterus for normal pregnancy. IVF, Islamic scholars emphasize, must be performed under strict guidelines, not the least of which is that the fertilization has to be of a sperm and an egg of a properly married couple.

“Scientists assure us that it is inevitable and also desirable to produce several embryos to give the woman a better chance of getting pregnant. The spare embryos that result from IVF procedures are either frozen or destroyed. Scientists have discovered that the stem cells of these embryos have the potential to develop and differentiate into any of the 200-plus kinds of cells in the human body.

“The Islamic Institute supports stem cell research on these spare embryos from in-vitro fertilization. Under the Islamic principle of the “purposes and higher causes of the sharia (Islamic law)”, we believe it is a societal obligation to

¹⁵ *Islamic Institute Supports Embryonic Stem-Cell Research and Releases Poll Showing Muslim American Support*, Islamic Free Market Institute Foundation, www.islamicinstitute.org/pressr/news-stem-cell.htm, 27 August 2001.

perform research on these extra embryos instead of discarding them. Thousands of embryos that would be otherwise discarded every year in fertility clinics could potentially be used for research. None of the Islamic scholars in the panel, nor the ones we subsequently consulted, felt the opinion was in anyway contradictory to Islamic principles. Additionally, we strongly feel that there should be strict guidelines and proper procedures to ensure there is no potential abuse. These guidelines should include the full informed consent of the donor couple.”

Multi-Faith Groups

Religious Coalition for Reproductive Choice (RCRC)¹⁶

“As people of faith, we have deep respect for human life. We believe, as do most authorities and commissions that have addressed the issue, that human embryos have the potential of personhood and, as such, they deserve respect. But excess embryos slated for destruction must not be placed above persons whose pain and suffering might be alleviated due to the knowledge gained from studying embryonic cells. Placing obstacles in the way of life-saving research with embryonic stem cells that are already created and will be destroyed is misguided. In the case of existing embryos that will be destroyed, providing adequate federal funding for research is, in our view, fully consistent with respect for human life.”

Jewish Groups

Conservative Judaism¹⁷

“WHEREAS there is a grave shortage of organs available for transplantation, leading to thousands of deaths each year;

“WHEREAS serious illnesses and conditions leading to disability and often death may be ameliorated or cured through new technologies;

“WHEREAS the Committee on Jewish Law and Standards overwhelmingly approved a *teshuvah* “Stem Cell Research” by Rabbi Elliot Dorff, which permits using human embryonic germ cells from aborted fetuses and embryonic stem cells from frozen human embryos originally created for procreation but not about to be discarded for research into creating cures for a number of human ailments;

¹⁶ *Embryonic Stem Cell Research: Religious Views*, Religious Coalition for Reproductive Choice, www.rcrc.org/news/views/stemcells.cfm, 2006.

¹⁷ *Resolution in Support of Stem Cell Research and Education*, Rabbinical Assembly, 2005.

“WHEREAS the *teshuvah* further permits creating stem cells for research by combining donated sperm and eggs in a Petri dish, cloning, or by extracting a cell from an early embryo under specific conditions;

“WHEREAS the *teshuvah* limits itself to research for therapeutic purposes and not enhancement; and

“WHEREAS the *teshuvah* also calls for education of our laity regarding donation of an aborted fetus or unused frozen embryos for the purpose of such life-saving research.

“THEREFORE BE IT RESOLVED that the Rabbinical Assembly advocate for the use of human embryonic germ cells and stem cells for research in all appropriate ways;

“BE IT FURTHER RESOLVED that the Rabbinical Assembly support the use of this technology for healing purposes; and

“BE IT FURTHER RESOLVED that the Rabbinical Assembly embark on an educational effort to educate our lay leaders and membership regarding the importance of fulfilling this act of *hesed*, which may lead to the mitzvah of *pikuah nefesh*.”

*JLaw.com*¹⁸

“Halakha does not consider any embryonic development within forty days of conception as having the sacred protected status of a human being. Therefore, the use of embryos for stem cell research is not considered an act of destruction of life. Consequently, in view of the possible, very positive results of stem cell research for the cure of various diseases, it is not only permitted but it is an imperative to support and proceed with this field of science.

“At this time, this decision is limited to the removal of stem cells from embryos resulting from in-vitro fertilization developed for reproductive purposes. The decision is based on the current assumption that such embryos provide sufficient quantities and variety of types to proceed with stem cell research, to the end of scientific knowledge for the relief of serious illness and the saving of lives. Should this category of embryos prove to be insufficient in quantity[,] or should it consist of too narrow a profile of humanity, and not reflective of the variety of genetic and histological types, thus limiting the potential for healing and for saving lives, then it will be necessary to reconsider the scope of this decision.”

¹⁸ *Statement Regarding Stem Cell Research*, Rabbi Michael J. Broyde, Beth Din of America, www.jlaw.com/PressReleases/01-08-21.html, 21 August 2001.

Reconstructionist Rabbinical Association (RRA)¹⁹

“This resolution does not endorse reproductive cloning or the creation of new embryos for the purpose of this research. Unfortunately, US Federal funding for such research has been severely hampered by an executive order from President Bush. This limits the research to the few cell lines already kept in culture on the date of the Executive Order. This means that potentially life-saving research has been seriously hampered and that future stem cell research will be conducted largely by commercial research programs, with use of the results restricted by patent.

“Other movements within Judaism—Conservative, Reform, and Orthodox—have made statements or passed resolutions of public support for funding of stem cell research, easing of the existing restrictions on such research, and the development of regulations that will maintain ethical and open oversight. All agree that the Jewish value placed on the saving of a single life, the mitzvah of *pikuah nefesh*, is an important consideration. It takes precedence over concern for an embryo, which lacks the status of a living person, and is available because of an abortion or because it is about to be discarded by a fertility clinic.

“Therefore, be it resolved that the Reconstructionist Rabbinical Association approves the following measures:

- a. The RRA endorses both adult and embryonic stem cell research as long as new embryos are not created specifically for the purpose of research.
- b. In recognition of its many potentially life-saving applications, the RRA urges substantial federal funding for both kinds of research; not limited to the original cell lines approved by NIH.
- c. We call upon RRA rabbis to educate Reconstructionist congregations about the issue, and to support the donation for medical research of embryos that are about to be discarded by fertility clinics and of aborted fetuses.
- d. We will publicize our stance on this issue by release of this resolution to general and Jewish news media, our congregations, and to local clergy associations.”

Union of Orthodox Jewish Congregations²⁰

“Open letter to President George W. Bush

“[E]xpress our support for federal funding for embryonic stem cell research to be conducted under carefully crafted and well-monitored guidelines.

¹⁹ *Resolution on Educational and Political Support of Stem Cell Research*, Reconstructionist Rabbinical Association, www.therra.org/members/conv2005/Res-StemCell-2005.pdf, 25 March 2005.

²⁰ *Letter to President Bush*, Union of Orthodox Jewish Congregations of America Institute for Public Affairs, www.ou.org/public/statements/2001/nate34.htm, 26 July 2001.

“On the one hand scientific research indicates that there is great life-saving potential in embryonic stem cell research, potential that warrants federal support. On the other hand, we must be vigilant against any erosion of the value that American society affords to human life, including potential human life.

“Our Torah tradition places great value upon human life; we are taught in the opening chapters of Genesis that each human was created in G-d's very image. The potential to save and heal human lives is an integral part of valuing human life from the traditional Jewish perspective. Moreover, our rabbinic authorities inform us that an isolated fertilized egg does not enjoy the full status of person-hood and its attendant protections. Thus, if embryonic stem cell research can help us preserve and heal humans with greater success, and does not require or encourage the destruction of life in the process, it ought to be pursued.

“Nevertheless, we must emphasize, that research on embryonic stem cells must be conducted under careful guidelines. Critical elements of these guidelines, from our perspective, relate to where the embryonic stem cells to be researched upon are taken from. We believe it is entirely appropriate to utilize for this research existing embryos, such as those created for IVF purposes that would otherwise be discarded but for this research. We think it another matter to create embryos *ab initio* for the sole purpose of conducting this form of research.

“Because of the ethical concerns presented by embryonic stem cell research and the reports of potentially garnering similar benefits from research on adult stem cells, we would urge you to simultaneously increase funding for adult stem cell research.

“Other elements of an ethically sensitive oversight regime would include a rigorous informed consent process from future IVF procedure participants, a fully funded and empowered oversight body comprised of scientists and bio-ethicists, and periodic reviews by relevant Executive branch agencies and congressional committees.”

Union for Reform Judaism (URJ)²¹

“Jewish tradition teaches the value of saving even a single life, and the callousness of failing to save a life when possible. As we learn in the talmud, “whoever causes the loss of a single soul is as though he caused the loss of a world entire; and whoever saves a single life is as though he saved a universe” (Talmud, Sanhedrin 37a).

“Clearly, there is a need for moral and ethical deliberation, yet we know that millions of God's children are plagued by diseases and injuries that we have the

²¹ *Resolution on Stem Cell Research*, Union for Reform Judaism, www.urj.org/Articles/index.cfm?id=7152&pge_prg_id=30698&pge_id=1625, November 2003.

potential to heal. The ethical choice must be to advance our research into lifesaving technologies, not abandon it. THEREFORE, the Union for Reform Judaism resolves to:

1. Support:
 - a. Research using both adult and embryonic stem cells, in addition to the existing lines currently approved for funding by the United States and Canadian governments;
 - b. Research using somatic gene therapy;
 - c. Research using somatic cell nuclear transfer (SCNT) technology for therapeutic cloning; and
 - d. Government funding for all such research;
2. Oppose efforts to restrict or penalize scientists, clinicians, or patients for participating in stem cell research and SCNT technology for therapeutic purposes;
3. Support appropriate legislative and executive actions consistent with the above objectives;
4. Support efforts by the scientific community to develop regulations and monitor those using SCNT technology; and
5. Call upon congregations, in conjunction with the URJ Department of Jewish Family Concerns and the Commission on Social Action, to create educational programs that explore the issues raised by genetic technology within a framework of Jewish values.”

Unitarian Universalist (UUA)²²

“[T]he right of women to make their own reproductive choices . . . scientific inquiry is an active avowal of our social responsibility.

“The science of human stem cell manipulation stands at the earliest stages of what may prove to be a long journey of discovery. Human beings originate from stem cells, and we produce stem cells in many places in our bodies during our entire lives. Because stem cells give rise to other kinds of cells, they hold out the hope of creating cures for a number of terrible human afflictions. For this reason, as a compassionate faith, we should welcome the development of this infant science.

“Some types of stem cells are found in human embryos. Because embryonic stem cell science requires the destruction of early-stage, microscopic human embryos, those who consider embryos to be persons have objected to this aspect of stem cell research. Because I do not consider human embryos to be people, and because Unitarian Universalists insist that reproduction is a personal and private matter, I believe that there should be no ban on embryonic stem cell research.

²² *Statement by the Rev. William G. Sinkford*, Unitarian Universalist Association of Congregations, www.uua.org/news/011114.html, 14 November 2001.

“However, I also think that as people of faith, we need to accompany the development of this new science with careful and continual scrutiny, offering our Unitarian Universalist principles and tradition as tools for the emerging ethical exchange . . . no human embryos should be created specifically for stem cell experimentation, thus turning human life and human reproduction into a commodity—surely a clear affront to our first principle affirming the inherent dignity of human beings.

“On August 9, President Bush announced support for federal funding for stem cell research under limited conditions. I am happy with the President's support of stem cell research, and I am glad to see the formation of a prestigious panel to inquire further into ethical considerations of this work. Yet I regret that the President has limited his support to the use of so-called stem cell 'lines' that might confine this entire field of scientific research to tools that are locked up by commercial interests. While all discoverers should enjoy our Constitution's protection of inventor's rights, the common biological heritage of humankind should never become privatized, earmarked for the benefit of the few to the detriment of us all.”

Appendix D: Resources

For more information, please refer to the following resources.

The American College of Obstetrics and Gynecology (ACOG), www.acog.org, 2006.

American Diabetes Association (ADA), www.diabetes.org, 2006.

Abortion in Judaism, Daniel Schiff, Cambridge University Press, 2002.

American Medical Association (AMA), www.ama-assn.org, 2006.

Christopher Reeve Paralysis Foundation (CRPF), www.paralysis.org, 2006.

The Coalition for the Advancement of Medical Research (CAMR),
www.camradvocacy.org, 2006.

The Education Fund of Family Planning Advocates of New York State,
www.edfundfpa.org, 2006.

Episcopal Church, USA (ECUSA), www.ecusa.anglican.org/, 2006.

Guidelines for Human Embryonic Stem Cell Research, Committee on Guidelines for Human Embryonic Stem Cell Research, National Research Council, National Academies of Science, www.newton.nap.edu/catalog/11278.html, 2005.

The International Stem Cell Forum, www.stemcellforum.org, 2006.

Islamic Free Market Institute Foundation, www.islamicinstitute.org, 2006.

JLaw.com, www.jlaw.com, 2003.

Juvenile Diabetes Research Foundation (JDRF), www.jdrf.org, 2006.

Marital Relations, Birth Control and Abortion in Jewish Law, David Feldman, Schocken Books, 1974.

Parkinson's Disease Foundation (PDF), www.pdf.org, 2006.

Principles of Biomedical Ethics, Tom L. Beauchamp and James F. Childress, Fifth Edition, Oxford University Press, 2001.

Presbyterian Church, USA (PCUSA), www.pcusa.org, 2006.

Rabbinical Assembly, www.rabbinicalassembly.org, 2006.

Reconstructionist Rabbinical Association (RRA), www.therra.org, 2006.

Religious Coalition for Reproductive Choice (RCRC), www.rcrc.org, 2006.

***Sacred Choices: The Right to Contraception and Abortion in the Ten World Religions*, Daniel C. Maguire, Fortress Press, 2001.**

***Sacred Work: Planned Parenthood and Its Clergy Alliances*, Tom Davis, Rutgers University Press, 2005.**

National Institutes of Health (NIH), www.stemcells.nih.gov/, 2005.

***Stem Cell Now: From the Experiment That Shook the World to the New Politics of Life*, Christopher Thomas Scott, Pi Press, 2005.**

***Stem Cell Research: What You Need to Know*, The Stem Cell Action Network, www.stemcellaction.org**

Union of Orthodox Jewish Congregations of America Institute for Public Affairs, www.ou.org, 2006.

Union for Reform Judaism (URJ), www.urj.org, 2006.

Unitarian Universalist Association (UUA), www.uua.org, 2006.

United Church of Christ (UCC), www.ucc.org, 2006.

United Methodist Church (UMC), www.umc.org, 2006.

The Education Fund of Family Planning Advocates of New York State

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