4.
The Nature Protection Framework

The central question that orients the *nature protection framework* is this: are scientists manipulating the genetic nature of human beings to such an extent that they "play God" and risk hurling our society down a path toward a *Brave New World*? To this question one could, in principle, answer yes or no. Critics of stem cell research answer yes.

When opponents to stem cell research and similar research into genetics speak, one can hear frequent references to Prometheus, Frankenstein, pride, *hubris*, and disdain for the so-called technoscientific or post-human future. The appeal to nature protection can be recognized with its slogan descriptors, such as "anti-Brave New World" or "anti-playing God."

Arguments against geneticists from within this framework rise up out of a stew pot of fear. The fear at work here is that the human race is being hoodwinked by a conspiracy of mad scientists and

their paid ethicists to sacrifice what is precious about human nature while promoting a post-human future. Human nature is under threat; and we must protect it!

From what do we need protection? The threat comes from the de-humanizing forces of technology. Almost nobody openly advocates creating a *Brave New World* as depicted in Aldous Huxley's novel, written in 1931. The enemy is not mounting a direct assault. Rather, the enemy is ambient. It inheres to our cultural environment. It is the culture of progress and technological advance applied to the essence of human nature. Human nature is just fine the way it is, thank you. It does not need improvement.

The anti-Brave-New-World rebels feel that they stand in opposition to an implicit worldview—what they perceive to be a dominant or prevailing worldview—over against which they need to take a stand. Lutheran theologian Philip Hefner describes this worldview. "We approach nature—including our own human nature—in terms of what we can make of it; nature is not something we accept, rather it is the object of our fantastic ability to re-shape our world. Further, this characteristic is not incidental, but it reveals itself as a fundamental American habit of the heart."[1] The American habit that opponents to a brave new world shun is the habit of re-shaping what nature has given us. To technologize and transform the human race into a post-human future strikes fear into the hearts of those who revere nature as it is.

The U.S. President's Council on Bioethics argues for protecting human nature

Arguments raised from within this framework have been most coherently articulated by the majority members of President George W. Bush's Council on Bioethics.[2] Consciously calling to mind the moral warnings of Huxley's famous *a Brave New World*, this framework comprehends the stem cell debate by first imagining undesirable and unforeseen consequences of stem cell research, and working backward from these undesirable futures to regulate present-day policy. Positions employing this framework usually assume a reverence for nature, an appreciation for the human plight with reproduction and disease. They fear getting too far away from what is natural.

Leon Kass, University of Chicago professor and former chair of President George W. Bush's Council of Bioethics (COB), speaks for the policymakers. When denouncing reproductive cloning, he writes, "I exaggerate somewhat, but in the direction of truth: we are compelled to decide nothing less than whether human procreation is going to remain human, whether children are going to be made to order rather than begotten, and whether we wish to say yes in principle to the road that leads to the designer hell of *Brave New World*."[3] Kass's denunciation of reproductive cloning here leads also to a correlate denunciation of therapeutic cloning—that is, a ban against stem cell research. Even if stem cell research has some

redeeming features, it should be outlawed because the development of the technique for therapeutic cloning could be co-opted by those who would use it for reproductive cloning. "What we need is an all-out ban on human cloning, including the creation of embryonic clones."[4]

Nature protection requires that we avoid playing God with our genomes

To protect human nature, we must avoid playing God with our genomes, say nature protectionists. Opponents to playing God argue that while any individual case of technoscientific advance might be ethically permissible, the cumulative effects of widespread biotechnological pursuit cannot be adequately anticipated. Nature protectionists worry that human desire for technological advancement will go unbridled, confusing genetic medicine with genetic enhancement, thus producing an unjust society of genetic haves and have-nots. As such, these moralists argue that it is pride or *hubris* to believe that through science and technology we can control human biological destiny. To think that we can control human nature through genetic manipulation is to play God; and it is to risk reprisal by nature, resulting in some unimaginable tragedy.

Called to mind here is the ancient myth of Prometheus and the modern myth of Frankenstein. Leon Kass shrinks away in horror from "the Frankensteinian *hubris* to create human life and increasingly to control its destiny; man playing

God."[5] Within this framework some ethicists conclude that destruction of embryos, even in pursuit of medical benefits, risks coarsening society to the value of nascent human life; and, as such, its future risks outweigh its present benefits.

In the ancient world of the Greeks, people feared the gods of Olympus. They sought to propitiate the gods in order to ensure health and prosperity. We moderns no longer believe in such gods. In their place we have set nature. Instead of the gods, some among us believe we should revere nature. We have replaced an avoidance of acting *contra deum*, against God's will, with a new proscription against acting *contra naturam*, against nature. To avoid "playing God" means for us to avoid acting contrary to nature. What has happened is that nature has become tacitly sacred.

Implicit in the anti-playing-God position, therefore, is a reverence for nature that makes nature functionally sacred. DNA has become the icon of nature's sacredness. Assumed to be the essence or secret to life, the genetic code is lifted up by this position as quasi-holy. With their secular sacrality, the genes should be morally off-limits to science. Scientists who alter the human genome are accused of playing God, of crossing the line that led to the punishment of Prometheus by Zeus.[6]

Is there wisdom in "yuck"?

When the cloning controversy broke out with the announcement of Dolly the cloned sheep in late

February 1997, the entire world went, "yuck!" How dare scientists manipulate and violate our sacred DNA! The reaction was visceral. Reproductive cloning was immediately perceived to be a threat to human individuality, identity, and dignity. Nobody wanted it. So scientists were blamed for presenting us with this threat, a threat nobody welcomed.

What many commonly understand as the "yuck factor" is known more eruditely as "wisdom of repugnance." Leon Kass refers to "yuck" as "repugnance." Furthermore, Kass believes repugnance tells us which direction our ethics should follow. The Kass position grounds ethics in the recognition that advancing technologies can strike with visceral repugnance that belies any easy rational articulation. This repugnance functions as a moral alarm, alerting us to the potential harms of "unnatural" intervention. *Offensive, grotesque, revolting, repugnant,* and *repulsive* are the words Kass lifts up as reactions to genetic technology, specifically cloning. Such words count methodologically for Kass, because he relies upon the wisdom inherent in the emotional intuition of repugnance. "Repugnance is the emotional expression of deep wisdom, beyond reason's power fully to articulate it."[7] Genetic technoscience dehumanizes us, because it alienates us from our sense of belonging to nature.

What all this presupposes is commitment to a form of naturalism. It is not explicitly theological in that no appeal is made to divine revelation.

Yet it is implicitly theological or at least philosophical. This is because nature in the form of human DNA takes on a tacitly sacred status. What yuck or repugnance do, allegedly, is bring our deep nature up to the surface where it can play a role in public policymaking. We label the assumed position within the nature protection framework *neo-naturalism.*

Social activist Jeremy Rifkin provides a full-blown naturalism that seeks a "resacralization" of nature. Rifkin objects to "the upgrading of existing organisms and the design of wholly new ones with the intent of perfecting their performance." To protect our genetic nature from human techno-scientific intervention and modification, he trumpets: "The resacralization of nature stands before us as the great mission of the coming age."[8] Rifkin assumes that nature is good as we find it. Biotechnical interventions, such as embryonic stem cell research and regenerative medicine built on genetic modification, are violations of the moral order of nature. The ethical import of resacralizing nature is to provide moral warrant for preventing scientists from re-engineering DNA.

Laurie Zoloth suggests that this protectiveness toward mother nature is due to a vague fear that modernity is moving too quickly. Nostalgia for a disappearing past rises up within us to say, no! There are some things about nature we simply do not need to know; and certainly there are some things about nature we ought not to try to change! "Research raises fears about forbidden and new

knowledge; in other ways, it potentiates fears about violations of 'mother nature', an argument engaged by both fundamentalists and environmentalists. The forbidden nature or the speed of research is part of a larger debate about modernity, its pace, and its uses."[9]

Nature protectionists, like embryo protectionists, fear a slippery slope

Embryo protectionists and nature protectionists fear that, if we permit the destruction of blastocysts for use in medical research and therapy, we will gradually lose our commitment to protect human life in general. The bishops of the Orthodox Church in America give voice to this fear. "The slippery slope . . . is dangerous and potentially irreversible. . . . The slope will lead to a tragic devaluation of human life."[10]

From within the U.S. President's Council, COB member Charles Krauthammer rings the alarm. "We will, slowly and by increments, have gone from stem cells to embryo farms to factories with fetuses hanging (metaphorically) on meat hooks waiting to be cut open and used by the already born."[11] The passion with which resistance to stem cell research rises is due in large part to the fear of the slippery slope.

Christopher Thomas Scott does not fear the slippery slope that leads from stem cell decisions ineluctably toward a Brave New World. Previous advances in medical science have not demonstrated

that society allows matters to get out of control. "The *Brave New World* view argues that we stand at the precipice of a slippery slope. It contends that using blastocysts for research amounts to human commoditization, that it inevitably encourages a marketplace of embryo farms, fetuses made for spare parts and cloned human beings. I think this scenario is unlikely. . . . The steady march of humankind's medical discoveries has been overwhelmingly used for good."[12]

Some argue for regenerative medicine and other forms of technoscience

Ann Kiessling and Scott Anderson would like to see stem cell science move forward; and this makes them impatient with nature protectionists who accuse researchers of playing God or acting like Frankenstein. These two blame the scientific community for this, because scientists too often hide behind the complexity of their self-descriptions. This creates an unnecessary and dangerous sense in the wider public that laboratories are mysterious and sinister places. "The usual concern is that the scientists are trying to play God, but are instead creating monsters using dark and mysterious technologies. Unfortunately, the language of the stem cell investigator is still baffling to the majority of citizens. Instead of scientists valiantly struggling to cure disease, many see Dr. Frankenstein tending his embryo farm. Scientists, having made their research inaccessible to the

layperson, must shoulder some of the blame for the confusion."[13]

Still, some advocates of technoscience are in-your-face, so to speak, about transforming human nature into something beyond nature. One can find such commitments among nanotechnologists and post-humanists as well as geneticists. Stanley Shostak, for example, would give a neo-naturalist nightmares. He contends that "a high priority should be placed on manipulating genes, fulfilling biotechnology's potential for creating a healthier and happier humanity."[14] Going beyond happiness as we have known it, Shostak will stop at nothing short of making people immortal through regenerative gene therapy.

Although sharing this optimism of what genetic science can accomplish, Michael D. West presses us forward but with a bit more caution against a Brave New World. On the one hand, West strongly supports scientific advance in the direction of improving human health and well-being. "I actually value the title of Aldous Huxley's novel *Brave New World,* for we need to make a new world—not the world of Aldous Huxley's novel, but a world free of the scourges of diabetes and heart disease."[15] Yet, on the other hand, West opposes genetic enhancement and, thereby, opposes a post-human future. "My nightmare is that the *hubris* of some scientists would have us engineering *people* from genetically modified cells. Their goal is 'enhancement', to make 'superpeople', individuals better than any living on the planet today."[16] Making superpeople is West's nightmare, not dream. Although there may be a threat to our humanity lurking in genetic science, West is convinced that the threat is not coming from human embryonic stem cell research.

Nonmaleficence orients the nature protection framework

It is worth noting that, like the embryo protection framework, the nature protection framework portrays the stem cell debate primarily in terms of nonmaleficence. Accordingly, our primary moral responsibility is to guard against the potential negative consequences of biotechnological research. In this framework ethicists wish to avoid doing harm to our DNA and to our culture; whereas the embryo protectionists wish to avoid doing harm to the blastocyst.

In summary, the nature protection framework is an application of the widespread fear that advancing technology risks divorcing our consciousness as human beings from our biological embeddedness in the natural realm. More frequently than not, positions taken within this framework partner themselves with the embryo protectionists. This certainly has been the case with President George W. Bush, whose COB gives voice to both nature protection and embryo protection.

5.
The Medical Benefits Framework

When in 2004 California voters passed Proposition 71—the California Stem Cell Research and Cures Initiative—the motive was clear: to help cure people from suffering. The ballot measure began: "Millions of children and adults suffer from devastating diseases or injury that are currently incurable, including cancer, diabetes, heart disease, Alzheimer's, Parkinson's, spinal cord injuries, blindness, Lou Gehrig's Disease, HIV/AIDS, mental health disorders, multiple sclerosis, Huntington's disease, and more than 70 other disease and injuries."[1] The measure went on to authorize $295 million in bond sales per year for ten years to fund stem cell research, all in the hope that this form of medical science could bring the human race less suffering in the future. This measure was developed within the *medical benefits framework* of ethical deliberation.

Recall that the embryo protection and nature protection frameworks orient themselves around

the bioethical principle of nonmaleficence—that is, toward avoiding harm to either the embryo or to our human nature. Nonmaleficence belongs to part of Hippocrates's admonition to benefit and do no harm. As we turn to the medical benefits framework, it is the other principle that moves front and center, namely, beneficence. The ethical targets are those persons, perhaps numbering in the billions on our planet, who suffer from diseases or traumas that regenerative medicine could help.[2]

The orienting ethical questions within the medical benefits framework include the following: if regenerative medicine could provide a leap forward in the relief of human suffering and the enhancement of human flowering, does this provide sufficient moral warrant for supporting stem cell research? Should society muster resources now in order to benefit those who will be suffering a half-generation from now? Should we see medical scientists as agents of God's creative and redemptive work?

We find many Jewish thinkers saying yes. They argue that the pursuit of medical science is itself a religious responsibility. The religious responsibility position can be found among Jewish ethicists who rely on the concept of *tikkun olam*—the responsibility to join God in repairing and transforming a broken world. Similarly, many Christian theologians and ethicists appeal to the concept of *agape*—understood as the responsibility to love one's neighbor. Virtually all Jewish ethicists work from within the medical benefits framework; and many Christian thinkers do as well.

Christian theologians working within this framework believe that God intends abundance or "fullness" of life for all (John 3:16). Although this "gospel in miniature," as Martin Luther described this passage, uses the word *eternal* to describe life, it carries the connotation of "abundant" or "flourishing" life. Because our life in Christ is eternal, our temporal life becomes abundant.

With this in mind, advocates of regenerative medicine within the medical benefits camp focus on the revolutionary therapeutic potential represented by stem cell research. As we have repeated many times, stem cells hold out hope of developing therapies for persons suffering from cancer, spinal injury, heart disease, macular degeneration, diabetes, Parkinson's, Alzheimer's, and countless other diseases that devastate many in our population. If science in the form of regenerative medical research can give expression to Christian compassion for those who suffer, and can serve human well-being and flourishing, if not abundance, this is moral warrant to do so. To support science in this enterprise is an act of society's stewardship. It supports a God-given potential for the benefit of this world.

Jewish theology and bioethics categorically supports regenerative medical research

All Jewish organizations that have officially addressed the public-policy question of stem cell

research have come out supportive, even supportive of federal funding. With the tradition of *tikkun olam* as the background, Jews believe we in the human race have been invited by God to participate in the healing of the as-yet unfinished creation. "After creating man and woman, God empowered them to enter a partnership with Him in the stewardship of the world. The Torah commands us to treat and cure the ill and to defeat disease wherever possible; to do this is to be the Creator's partner in safeguarding the created."[3] Jewish tradition strongly supports the practice of medicine and, thereby, indirectly supports this kind of medical research.

More than a mere divine invitation is at stake. Actually, God places on us a duty to pursue healing, a command. Jewish bioethics is largely deontological—that is, grounded in the call to duty. "For Judaism, God owns everything, including our bodies," writes bioethicist Elliot N. Dorff. "God lends our bodies to us for this duration of our lives, and we return them to God when we die." What this implies is that "God can and does assert the right to restrict how we use our bodies."[4] This leads directly to the mandate to heal, to moral support for the practice of medicine. "Because God owns our bodies, we are required to help other people escape sickness, injury, and death."[5] Support for clinical medical practice implies, in addition, support for scientific research on behalf of human health and well being.[6]

Dorff proceeds to apply these commitments to the stem cell controversy. "The potential of stem cell research for creating organs for transplantation and cures for diseases is, at least in theory, both awesome and hopeful. Indeed, in light of our divine mandate to seek to maintain life and health, one might even contend that from a Jewish perspective we have a *duty* to proceed with that research."[7] It is our duty, based upon a command implicit in God's creation, to pursue stem cell research.

Laurie Zoloth gives voice to her response to a duty to God to heal. "We have a duty to heal, and this is expressed in legal and social policy. To turn from the possibility of healing would be an abrogation of an essential duty."[8] This recalls Rabbi Moshe David Tendler, who testified before the U.S. President's National Bioethics Advisory Commission during the Clinton administration. He said that "mastery of nature for the benefit of those suffering from vital organ failure is an obligation. Human embryonic stem cell research holds that promise."[9]

We can expect that Jewish theologians and bioethicists—virtually all Jewish intellectuals—will support regenerative medicine, including human embryonic stem cell research. As they do so, they work from within the medical benefits framework.

Jesus' ministry of healing provides a model for Christian ethics

Jesus was a healer. So also are today's medical doctors. Indirectly, so also are stem cell researchers.

Jesus forcefully taught about healing as well as demonstrating it. The Good Samaritan parable provides a vivid example. According to the New Testament, Jesus is asked by a man, "What must I do to inherit eternal life?" The man wants immortality, life in abundance. What follows is a dialogue regarding God's law. The questioner claims that he has fulfilled the law, to the letter. Yet something is missing. What is missing is compassion for the neighbor, an aggressive beneficence. To get at what is missing, Jesus tells a story. This story is instructive for us here.

> "A man was going down from Jerusalem to Jericho, and fell into the hands of robbers, who stripped him, beat him, and went away, leaving him half dead. Now by chance a priest was going down that road; and when he saw him, he passed by on the other side. So likewise a Levite, when he came to the place and saw him, passed by on the other side. But a Samaritan while traveling came near him; and when he saw him, he was moved with pity. He went to him and bandaged his wounds, having poured oil and wine on them. Then he put him on his own animal, brought him to an inn, and took care of him. The next day he took out two denarii, gave them to the innkeeper, and said, 'Take care of him; and when I come back, I will repay you whatever more you spend.' Which of these three, do you think, was a neighbor to the man who fell into the hands of the robbers?" He said, "The one who showed him mercy." Jesus said to him, "Go and do likewise." (NRSV Luke 10:30-37)

Significant here is that both the priest and Levite passed by on the other side. By this passing they could pass an ethical test when nonmaleficence is the criterion. When they saw the suffering man, then did not walk over and harass him or kick him. They did not add to his misery. They were certainly ethical in this sense.

Still, Jesus lured his listener toward something more. The Samaritan felt "pity," and he acted on his pity. He found a creative way to provide help and sustenance. We ask: could the Good Samaritan provide a model for our society today? Could regenerative medicine be understood by analogy as the aid the Samaritan offered to the suffering victim? Supporters say yes.

After wondering what to do, the Samaritan elected to take the beaten man to the inn. In those days, hospitals named "Good Samaritan" had not yet been invented. The very existence in our society of hospitals named after the Good Samaritan is testimony that some have heard the call of compassion to go beyond nonmaleficence to beneficence.

Should ethics plan on making the future better than the past or present?

To make an argument in support of regenerative medicine from within the medical benefits framework coherent, ethics must be future-oriented. Beginning with a vision of a redeemed creation with an anticipated wholeness, present suffering becomes unacceptable. The biomedical sciences become a means by which one strives to realize that future vision during the present era.

The future orientation of this brand of moral reasoning fits with the future orientation of medical research. The promise of stem cell therapies still lies in the future. And it is still an uncertain future. The benefit of this research is contingent, still undetermined. Many critics who rail against mustering large sums of social capital to support regenerative medicine caution against the "hype" that is often associated with stem cells. To be realistic, this caution should be heeded. Yet also to be heeded is a reason to hope. In the place of "hype" some would put "hope"—genuine theological hope in the future. The science of regenerative medicine provides hope based on a vision of a future with improved human health and well-being.[10]

Theologically, human reality is not defined by its origin. The human race is not defined by its origin in the Book of Genesis, by the models of Adam and Eve. Nor is it defined by some moment in our evolutionary past when we emerged from the ancestry we shared in common with the primates. Rather,

who we are as human beings is defined by God's appointed destiny, by our future. This includes healing. It includes healing from pain and suffering, as well as healing from the vicissitudes of death. It includes resurrection into the new creation. Just as Jesus rose from the dead, the Christian promise is that we too shall rise (1 Cor. 15:20). We can envision with the last book of the Bible, Revelation, a future life with God in which "mourning and crying and pain will be no more" (Rev. 21:4). If God promises a future transformation, then today's ethics should not be oriented toward our past origin or maintaining our inherited nature. A transformationist anthropology should lead to a transformationist ethic.

Social justice is entailed in beneficence

We know what the justice questions are. Just to remind us, Yale ethicist Margaret Farley raises the issue of justice regarding stem cell research. "Who will be expected to be the primary donors of embryos or aborted fetuses? Will gender, race, and class discrimination characterize the whole process of research on stem cells? And will the primary goals of research be skewed toward profit rather than toward healing? Who will gain from the predicted marvelous therapeutic advances achieved through stem cell research—the wealthy but not the poor? The powerful but not the marginal?"[11]

Justice is an inextricable element in the beneficence agenda. The benefits of exotic science ought

not to be limited to only the wealthy who can pay large sums. Because of the cost of such expensive science, and because of the need for patenting intellectual property in order to draw financial investment, our society risks losing all the benefits of stem cell science to an economic system that favors the rich among us.

"In America, the uninsured with minimal access to basic health care continue to vex political policy," opines Laurie Zoloth. "International issues of distributive justice render the problem of access to new research and the therapies that will emerge from such research as a central ethical concern."[12]

The question of *access* looms large within the medical benefits framework. One might ask: how can we assure access to the benefits of regenerative science on the part of the poorest of the poor, regardless of where they live in this world? Smoke screens and sleights of hand on the part of investors and regulators who make big promises now must find that later, when delivery is ready, a system is in place to guarantee widespread access.

Can we accuse medical benefits advocates of utilitarianism?

It appears to critics from within the embryo protection framework that medical benefits advocates are utilitarian, that they *use* blastocysts as *means* to a further *end*. The passage cited above in the work of Laurie Zoloth could be an example. "The limited moral status of the *in vitro* blastocyst

determines duties to it, and the relatively larger (some say unlimited) duties to the ill and vulnerable may be primary ones. We have a duty to heal, and this is expressed in legal and social policy. To turn away from the possibility of healing would be an abrogation of an essential duty."[13] Note that Zoloth's argument is based upon an appeal to duty toward those who suffer; it is a deontological and not a utilitarian argument. Yet her opponents would consider this an example of utilitarianism or, even worse, consequentialism, in which our unqualified duty to the unborn is allegedly subordinated to a higher good.

Embryo protectionists say stem cell supporters are in the business of making a trade-off. It is not morally licit to trade the life of a potential person at the blastocyst stage for speculations that other patients might someday benefit from this kind of science. Nonmaleficence on behalf of the early embryo trumps beneficence on behalf of suffering patients.

To accuse medical benefits advocates of utilitarianism puts the public policy debate into the impasse with which we have become familiar. As pointed out earlier when citing Lisa Sowle Cahill, "Public debate sometimes seems to be caught in an impasse between the value of embryos and the promised benefits of stem cell research."[14] Now, the impasse may at first appear to be due to utilitarianism on the part of the medical benefits advocates; but a closer look will show that it is due to noncompossible ethical frameworks. No one working

from within the medical benefits framework proposes that we sacrifice early human persons on behalf of laboratory experimentation and the hope of relieving the suffering of others. It is not a matter of sacrificing babies to heal grown-ups.

Defenders will argue to the contrary that a beneficence position within the medical benefits framework is not utilitarian. It does not advocate sacrificing babies for grown-ups. Conscientious ethicists in this camp would not accept just any or all means to reach a desired end, to be sure. Some acts are inherently immoral; and a just end does not justify an immoral act. Beneficence advocates do not rely on a utilitarian framework. Even Jewish bioethicist Zoloth above was answering the call to duty, the divinely ordained duty to heal.

So, to blunt the attacks of their opponents, advocates of human embryonic stem cell research must spend some effort arguing from within the embryo protection framework. Most frequently, stem cell supporters who are more at home in the medical benefits framework will appeal to the 14-day rule or a similar developmentalist position on human personhood and human dignity. They need to deny that they are baby-killers. Once the matter of the moral status of the blastocyst is settled, then regenerative medicine advocates can return to arguments based on beneficence.

Some level of moral urgency adheres to scientific research

Those supporting regenerative medicine in the medical benefits camp argue strenuously that it is immoral for us to slow down the speed of research. Every year that goes by without developing effective therapies for cancer or heart disease or Alzheimer's means another year of needless suffering and death. The countless individuals who will continue to be victims of these genetically related diseases can claim that their blood is on the hands of the embryo protectionists who were able to use public policy to shut down life-saving research.

Eric Juengst and Michael Fossel raise an argument such as this. "If ethicists or the public would restrict the uses of embryonic stem cells, then they must then bear responsibility for those patients they have chosen not to try to save by this means. Currently, patients die regularly because transplantable organs are unavailable. There is no moral culpability in this: physicians are powerless. If stem cell research can provide the power to address this need, however, the claims of those patients become compelling."[15]

Conclusion

What we have done here is to analyze three theologically based ethical frameworks within which moral positions are currently being taken in the debate over the permissibility or non-permissibility

of embryonic stem cell research. In each framework, we note an implicit if not explicit commitment to protecting dignity. Whether it is the dignity of the embryo, the dignity of DNA, or the dignity of potential beneficiaries of medical research, all three frameworks presume that someone or something should be treated as an end and not utilized as a mere means.

This shared commitment to dignity demonstrates that all three positions should be considered *ethical* positions. None advocates something unethical or immoral. All want what is good and wholesome for the human race. Yet they find themselves in lively if not bitter opposition to one another. Curiously, ethically minded people can become gun fighters in moral wars and cultural wars, firing moral invectives. Each combatant believes he or she is right.

6.
The Research Standards Framework

The three ethical frameworks we have already treated share one item in common: all three are based upon recognizable theological (or philosophical, in the case of nature protection) assumptions regarding human nature and our ethical goal. One test of moral reasoning within each framework is consistency between moral decisions and the anthropological assumptions that undergird them.

Not so when we turn to the *research standards framework*. When we turn to what are becoming policies and guidelines and requirements that laboratory scientists must adhere to, we find an agglomeration of principles that do not seem to require either justification or coherence. One reason for this is that the moral reasoning behind research guidelines is frequently obscured by the translation from a theologically based framework into a secular framework. Scientists work within a secular ethical framework, which lifts up the moral standards to which they measure themselves. But

10. Hippocrates, *Epidemics*, 1:xi in W.H.S. Jones, *Hippocrates with an English Translation* (Cambridge, Mass.: Harvard University Press, 1959), 1:165.

11. Gene Outka, "The Ethics of Human Stem Cell Research," *God and the Embryo*, 31.

12. Frist's speech quoted by Michael Bellomo, *The Stem Cell Divide* (New York: American Management Association, 2006), 100.

13. Richard Doerflinger, "The Policy and Politics of Embryonic Stem Cell Research," *National Catholic Bioethics Quarterly* 1:2 (Summer 2001): 143.

14. H. Tristram Engelhardt, Jr., *The Foundations of Christian Bioethics* (Lisse: Swets and Zeitlinger, 2000), 261.

15. "Embryonic Stem Cell Research in the Perspective of Orthodox Christianity: A Statement of the Holy Synod of Bishops of the Orthodox Church in America," cited in *God and the Embryo*, 173.

16. Pontifical Academy for Life, "Declaration on the Production and the Scientific and Therapeutic Use of Human Embryonic Stem Cells," cited in *God and the Embryo*, 167.

17. Catherine M. Verfaillie, "Adult Stem Cells: Tissue Specific or Not?" *Handbook of Stem Cells*, ed. Robert Lanza, 2 vols. (Amsterdam: Elsevier Academic Press, 2004), 2:14.

18. Norman Ford, *The Prenatal Person: Ethics from Conception to Birth* (Oxford: Blackwell, 2002), 160, Ford's italics. See also Margaret A. Farley, "Stem Cell Research: Religious Considerations," *Handbook of Stem Cells*, 770.

19. Ann A. Kiessling and Scott Anderson, *Human Embryonic Stem Cells* (Boston: Jones and Bartlett Publishers, 2003), 194.

20. Karen Lebacqz, "On the Elusive Nature of Respect," *The Human Embryonic Stem Cell Debate*, 159.

21. Thomas A. Shannon, "Grounding Human Dignity," *Dialog*, 43:2 (Summer 2004): 117.

22. Meilaender, "Some Protestant Reflections," 145.

23. Lisa Sowle Cahill, "Stem Cells: A Bioethical Balancing Act," *America*, 184:10 (2001), 14-19.

4. The Nature Protection Framework

1. Philip Hefner, "The Genetic 'Fix': Challenge to Christian Faith and Community," *Genetic Testing and Screening*, ed. Roger A. Willer (Minneapolis: Kirk House, 1998), 76.

2. See: President's Council on Bioethics, *Monitoring Stem Cell Research* (2004) and *Beyond Therapy: Biotechnology and the Pursuit of Happiness* (2004) located online at: http://www.bioethics.gov.

3. Leon R. Kass, *Life, Liberty and the Defense of Dignity: The Challenge for Bioethics* (San Francisco: Encounter Books, 2002), 146.

4. Ibid., 167.

5. Leon R. Kass and James Q. Wilson, *The Ethics of Human Cloning* (Washington, D.C.: AEI Press, 1998), 18.

6. See: Ted Peters, *Playing God? Genetic Determinism and Human Freedom*, 2d ed. (New York and London: Routledge, 2002), for an extensive analysis of the Promethean myth at work in modern society.

7. Kass and Wilson, *The Ethics of Human Cloning*, 18.

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9. Zoloth, "Immortal Cells, Moral Selves," *Handbook of Stem Cells*, ed. Robert Lanza, 2 vols. (Amsterdam: Elsevier Academic Press, 2004), 1:749.

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11. Charles Krauthammer, Personal Statement in *Human Cloning and Human Dignity: The Report of the President's Council on Bioethics* (New York: Public Affairs, 2002), 328.

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15. Michael D. West, *The Immortal Cell* (New York: Doubleday, 2003), 212.

16. Ibid., 226, West's italics.

5. The Medical Benefits Framework

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2. See articles by Ted Peters and Gaymon Bennett, Jr.: "Cloning in the White House," *Dialog* 41:3 (Fall 2002): 241-44; "Defining Human Life: Cloning, Embryos, and the Origins of Dignity," *Beyond Determinism and Reductionism: Genetic Science and the Person*, ed. Mark L.Y. Chan and Roland Chia (Adelaide, Australia: ATF Press, 2003), 56-73; "A Plea for Beneficence: Reframing the Embryo Debate," *God and the Embryo*, ed. Brent Walters and Ronald Cole-Turner (Washington, D.C.: Georgetown University Press, 2003), 111-30.

3. "Cloning Research, Jewish Tradition and Public Policy: A Joint Statement by the Union of Orthodox Jewish Congregations of America and the Rabbinical Council of America," cited in *God and the Embryo*, 204.

4. Elliot N. Dorff, *Matters of Life and Death: A Jewish Approach to Modern Medical Ethics* (Philadelphia and Jerusalem: Jewish Publication Society, 1998), 15.

5. Ibid., 26.

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7. See: National Council of Churches of Singapore, *A Christian Response to the Life Sciences* (Singapore: Genesis, 2002).

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