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BABY-MAKING: THE FRACTURED FULFILLMENT OF HUXLEY'S BRAVE NEW WORLD

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The following is an essay adapted from a lecture delivered in March on Trinity International University's Deerfield campus in conjunction with the Drama Department's spring performance of Aldous Huxley's Brave New World, a play by David Rogers. The essay has been divided into two parts spanning the Spring and Summer 2011 issues of Dignitas.

PART I

I. SETTING THE STAGE

A. **GATTACA** AND THE EIGHTH DAY CENTER

When it was released in 1997, *GATTACA* was a science fiction thriller, a story of a world where the genetically engineered elite have exclusive rights to space travel, and the "naturally conceived" In-Valids perform the routine, menial tasks to serve and pamper the elite. Vincent, conceived the old fashioned way in the back of a Chevy, was short and had astigmatism and a weak heart. So, his parents, Marie and Antonio, determined not to repeat *that* mistake, instead opting to give their next child every possible advantage. They also reserved Antonio's name for their nearly-perfect son.

Their *in vitro* fertilization procedure (IVF) yielded four healthy embryos, two boys and two girls. The scene at the Eighth Day Center, where they were presented with their options, hints at the mingled anticipation and distress that is not too far removed from what parents experience today. We will return to that scene shortly.

GATTACA is just one of the examples from literature and popular culture that entice us to slow down and think about some of the most serious ethical questions facing us today. Hollywood has given us The Sixth Day on human cloning, The Island on involuntary organ donors, John Q on organ transplantation, and Minority Report on neuroethics, to name just a few. These are joined in literature by works such as C.S. Lewis' That Hideous Strength and, of course, Aldous Huxley's Brave New World.

Sometimes there is an eerie immediacy to the sci-fi futuristic scenarios depicted in these works. Scripts have had to be altered when real-day science threatened to overtake the in-the-future premise of the plot. Meanwhile, the moral conversation, the bioethical reflection, has struggled to keep up. Law and policy lag even farther behind, often feebly attempting to regulate only after a catastrophe or dispute.

Let me suggest that even further back in the field is the church. By "church," I am referring to the people in the pew, people who are actually making the decisions about the use of medicine and

technology. Too often, they turn to popular culture for moral guidance, if they even realize there is a moral question to be answered.

For our purposes here, I am going to explore just one of the areas where serious moral questions need to be answered: assisted reproductive technologies (ART). ART raises some of the most profound questions that human beings are invited to answer: the meaning of marriage, children, and family. The meaning of human dignity and human flourishing. Issues of disability and discrimination, planning, and control.

Let me pause and offer a disclaimer. I am raising sensitive issues such as contraception and infertility. Please hear me on this. I am not critiquing birth control. That is a separate discussion. Certainly the issue of infertility is a painful one, and it has probably touched all of us in some way. I do not want to convey insensitivity, and as a fertile mother, I would not presume to speak for infertile couples. Infertility, too, is grounds for a separate discussion. But infertility is implicated in what I am going to discuss. And, by necessity, I will be addressing assisted reproductive technologies that some of you may have considered or utilized. I have friends whose children were conceived by means of IVF. Once conceived, questions about the circumstances of a child's origins are irrelevant to his or her moral status, value and special dignity as human being. Each one is a precious, unique individual made in the image of God. Finally, I will be discussing procedures that used to be reserved for the privacy of the doctor's office.

GATTACA's story line is the upending of the genetically-perfected expectations of Vincent's brother, Anton. Anton is unable to match up to his potential, and is beat by his older brother in a swimming race, twice. Vincent, meanwhile, assumes the identity of Jerome, a silver medalist swimmer who is paralyzed in a suicide attempt after he failed to get the gold despite his "perfect" DNA. Where both Anton and the original Jerome fail, Vincent succeeds. GATTACA subtly, or perhaps not so subtly, reminds us of the burden of giftedness. The genetically "rich" bear the burden of parental, personal and cultural expectations of them.

Let's return to the scene in the Eighth Day Center. Marie and Antonio are informed that all four embryos are healthy, with no predisposition for major diseases, such as the heart disease that threatened to end Vincent's life by the age of 30. They encountered several decision points:

First, they chose the gender, a boy, so that Vincent could have a

from the director's desk

BY PAIGE COMSTOCK CUNNINGHAM, JD **EXECUTIVE DIRECTOR**

e have entered a new era of "choice." It is "choice" offered as an aspect of medical care for pregnant women. Pregnant women are increasingly offered the option of prenatal screening of their fetus. Originally intended for women at high risk due to maternal age or family history, prenatal screening (PNS) is rapidly becoming part of routine prenatal care for every pregnant woman. The ostensible goal is to enhance pregnancy by giving the mother the security of information, knowledge that is intended to alleviate concerns about her baby's health. Instead, this technology often creates more fears than it allays, and may actually induce women to terminate prematurely a successful pregnancy. This termination is, of course, by abortion, not premature delivery.

Genetic counseling is presumed to be nondirective and neutral as to the patient's decision making. Yet, there are no standards for consent and testing, what information should be provided, and whether counseling about potential genetically-linked disabilities should be provided prior to testing. The counselor's advice? "I would want to have as much data as possible to make an informed decision." This supposedly neutral counseling biases a patient in one direction: information about pregnancy is good; comprehensive testing is better; and that a patient will want to receive (and act upon) the results of that information.

Even if the couple accepts the PNS with the intention to continue the pregnancy regardless of results, they may have a difficult time defending that decision. Undue influence may be exerted by the genetic counselor, physician, or family members who prefer that the pregnant woman interrupt her potentially "problematic" pregnancy.

It is often assumed that a woman will abort a fetus with a congenital defect. Failure to terminate after a positive diagnosis has been labeled a "nonroutine decision." More than once, I have been told that a married woman who refuses abortion after a positive test may be ushered into a separate room to make sure that her husband is not pressuring her to continue the pregnancy.

Meanwhile, the mother may have lost a valuable part of the natural course of most pregnancies. Opting for PNS can lead an expectant mother to delay bonding with her child until the results of all tests are complete. The traditional anticipation and joy over a new life is tinged with concern over whether this child will be "normal." We have created a cultural phenomenon that Barbara Katz Rothman calls "the tentative pregnancy."

There is a better way. As Christians, we know that all life is a gift. Unlike the proverbial Christmas sweater, the gift of a new life does not have a receipt for return or exchange. We may not understand why a child bears serious genetic defects. But some families have boldly decided to receive that gift with loving, open arms. These are the families like Teresa whose story is one of resistance to medical eugenics. Four months prior to his birth, Teresa learned their son had an encephaly. "While this has been the most painful experience I've ever had to endure, it's probably been the most beautiful as well. Benedict spent his whole life in the arms of people who loved him; who could ask for a better life?"2

Choice, pregnancy, prenatal eugenics, and reproductive technologies share a family of ethical concerns. In this issue of Dignitas, we bring you Part I of a lecture I gave at Trinity International University in connection with a performance of the stage adaptation of Aldous Huxley's Brave New World. Part I outlines the legal, cultural, and theological origins of morally untethered reproductive technologies.

The generally "high tech" concerns of reproductive ethics point to a larger constellation of "low tech" concerns regarding women's bodies and women's health. Maternal health is closely linked to the health of her children and her family. Women in majority world countries need prenatal care, a qualified birth attendant, medical care for possible postpartum hemorrhage, and drugs to prevent transmission of HIV/AIDS to their children. Women are at risk of discrimination not just in their reproductive capacities, but throughout their lifespan. Young girls are at risk beginning in the womb, in cultures where male children are prized. They often are at the end of the line in receiving basic health care. Older women, past child-bearing years, may be cast aside.

At CBHD, we are digging into thoughtful reflection on how a Christian understanding of human dignity

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BHD often receives requests from educators and other individuals for popular resources that engage bioethics through various media (fiction, film, and television). In this edition, we offer a recap of relevant materials that have premiered on the silver screen or television between 1968 and 1999. Readers are cautioned that the films represent a wide variety of genres and may not be appropriate for all audiences. The reason for the rating classification is provided where available. Viewers are encouraged to read annotations/synopses available through such websites as imdb.com or movieweb.com.

CLINICAL ETHICS

Awakenings (Released 12/90, PG-13)

A Clockwork Orange (Released 2/72, R)

The Constant Gardener (Released 8/05, R for language, some violent images and sexual content/nudity)

Doc Hollywood (Released 8/91, PG-13)

The Doctor (Released 7/91, PG-13)

Dying Young (Released 6/91, R)

Elephant Man (Released 10/80, PG)

Heartsounds (Released 9/84, PG)

The Hospital (Released 9/72, PG-13 for thematic elements, sexual content and drug references)

Passion Fish (Released 10/92, R)

A Place for Annie (Released 5/94, PG for thematic elements and language)

Regarding Henry (Released 7/91, PG-13)

The Verdict (Released 8/82, R)

CLONING

Blade Runner (Released 6/82, R for violence)

The Boys from Brazil (Released 10/78, R)

DISABILITY ETHICS

Charly (Released 9/68, PG)

Elephant Man (Released 10/80, PG)

Mask (Released 3/85, R)

END-OF-LIFE

Lorenzo's Oil (Released 1/93, PG-13)

My Life (Released 11/93, PG-13 for mature subject matter)

Whose Life Is It Anyway? (Released 12/81, R)

HEALTHCARE

And the Band Played On (Released 9/93, PG-13)

Critical Care (Released 10/97, R for language and a scene of sexuality)

The Doctor (Released 7/91, PG-13)

An Enemy of the People (Released 3/78)

Patch Adams (Released 12/98, PG-13 for some strong language and crude humor)

ORGAN TRANSPLANTATION

Coma (Released 1/78, PG)

Steel Magnolias (Released 11/89, PG)

PATIENT'S RIGHTS / INFORMED CONSENT / HUMAN DIGNITY

Children of a Lesser God (Released 10/86, R)

Coming Home (Released 2/79, R)

Do You Remember Love? (Released 5/85, NR)

Elephant Man (Released 10/80, PG)

Good Will Hunting (Released 1/98, R for strong language, including some sex-related dialogue)

My Left Foot (Released 10/89, R)

My Life (Released 11/93, PG-13 for mature subject matter)

One Flew Over the Cuckoo's Nest (Released 2/76, R)

Philadelphia (Released 12/93, PG-13 for some graphic language and thematic material)

Rain Man (Released 12/88, R)

When a Man Loves a Woman (Released 3/94, R for language)

PUBLIC HEALTH

The Insider (Released 11/99, R for language)

The Ryan White Story (Released 1/98, NR)

REPRODUCTIVE ETHICS

Choices of the Heart: The Margaret Sanger Story (Released 3/95, NR)

Flatliners (Released 8/90, R)

The Handmaid's Tale (Released 3/90, R)

If These Walls Could Talk (Released 10/96, R for realistic depiction of abortions, a graphic shooting and some language)

Jurassic Park (Released 6/93, PG-13 for intense science fiction terror)

Kids Like These (Released 11/87, NR)

Malice (Released 10/93, R for sexuality, language and some violence)

A Private Matter (Released 6/92, PG-13)



uring August 2005, the Gulf Coast experienced the most expensive natural disaster in history. The remarkable devastation would be painfully remembered simply as Hurricane Katrina. Amidst the hue and cry of lives lost, levees that failed—and alleged FEMA incompetence—Hurricane Katrina's darkest moments, especially for medicine, continue to reverberate. It must never be forgotten that after the initial shock from the powerful storm had dissipated, forty-five corpses were retrieved from one New Orleans hospital under suspicious circumstances.¹ A subsequent article reporting the events was trenchant enough to receive a Pulitzer Prize.² At the time, it was alleged that some of these forty-five individuals were injected with sedatives such as morphine to relieve either their suffering or to deliberately hasten their deaths.³ Therein lays the rub of the principle of double effect. The Louisiana Attorney General and prominent forensic scientists labeled what happened homicide.⁴ The local coroner later testified in agreement with this claim and provided evidence of the drug levels to demonstrate what should have been a lethal cause and effect. Also critical to the ensuing debate, several of these persons whose death may have been hastened did not have a Do Not Resuscitate order. There was no evidence that any of the individuals consented to assisted suicide. One case study may provide insight.⁵

A sixty-one year-old man was at this New Orleans hospital awaiting colon surgery. He was a paraplegic, described as an individual with "a good sense of humor and a rich family life, (who) rarely complained." He did not have a Do Not Resuscitate order. Katrina ravaged the hospital, with temperatures reaching 110 degrees from a loss of power and was further complicated by an absence of running water. While evacuation efforts intensified, he said to his nurse, "Don't let them leave me behind." However, this man's evacuation was problematic from a logistical perspective—he weighed 380 pounds. Despite his explicit wishes, his life was ended by the administration of drugs. Were those medications given for his obvious suffering or to promote his death? Despite investigative efforts, that question still has not been answered.8

The disturbing discoveries would finally meet cultural realities. Although noted bioethicist Arthur Caplan observed that the drug administrations were "not consistent with the ethical standards of palliative care that prevail in the United States," and furthermore that "the death of a patient cannot be the goal of a doctor's treatment," what followed was relevant to what has become evolving ethical debate about what happened in that hospital. New Orleans was barely and haltingly recovering from a terrible disaster. If the doctors were

found guilty, it was presumed that an already depleted doctor corps would bolt the city or refuse to help in future emergencies. The decisions could have far-reaching national repercussions in the conduct of future emergencies. Those involved, one physician and two nurses, were not indicted by a grand jury. A 50,000-page file of discovery material regarding the aforementioned events remains in the hands of the Louisiana Supreme Court. It has not been released.

Much has been written regarding the rightness or wrongness of the acts themselves as well as the grand jury's determination. It is time for a retrospective reframing of a critical discussion that should not be permitted to expire unexplored.

The news regarding these events has been reported through several frames. Let's look at some of them. One interpretation was that these medical professionals were altruistic. Unlike others, they chose to stay despite substantial risks. Do not punish them for decisions made under uniquely trying circumstances. Secondly, there should be no question; it is critical to relieve suffering, so there could never have been any intent to hasten death. Another was that there were no rules to guide them—this was a one-of-a-kind emergency—and they were forced by circumstances out of their control to ad lib in some degree. I suggest another frame needs to be considered. Has society, that is, both the medical community and the culture at large, evaluated the important ethical issues embedded in this controversy? Undoubtedly, there will be more emergencies. Have we adequately considered the ethical dimensions of such situations in order to be prepared to respond morally?

In a disturbing number of online reports and ensuing comments, a majority of the electronic respondents did not see any wrong in what transpired. Some, in fact, hoped that even the families of the dead would be prevented from pursuing civil suits on behalf of their loved ones. Many have made the professionals in question heroes. There must be more to this cultural ethos than natural disasters, relief of suffering, and perceptions implying a paucity of guidelines.

Has the Christian-Hippocratic template for practice really disappeared? Recent scholarship has suggested that there are "several competing forms of professionalism at work." In fact, there are seven, including an entrepreneurial model that considers altruism to be the least important aspect of a physician's character. The same holds for a lifestyle definition of professionalism. In the same paper, the mandate that doctors do no harm is now identified as nostalgic. Is it not surprising then that what may have been unadulterated killing

has become trivialized, even by medical professionals? Or, that lay culture cannot see the distinction between relieving suffering and killing when physicians accomplish the acts in question? There were neither guidelines nor controversy once culture-at-large denied the binding precept that doctors do not kill.

History has repeatedly recorded the reprehensible deeds of physicians who crossed the line between white (life) and black (death) medicine. A moral society should shudder. However, new Louisiana laws will be enacted to supervise emergency physician practices in the future. In the words of the physician implicated in the post-Katrina events, "I think what happened to the three of us could really hurt volunteering across the nation."11 Implied in this statement is admission of unethical behavior. So a physician oversight panel will decide if triage and death hastening during emergency medical response to disasters is to be embraced. Which of the burgeoning models for professionalism's particular definition of relieving suffering will become normative? If the response to the events that complicated Katrina is any guide, the line they draw between relief of suffering and killing will not be directed by a Christian-Hippocratic compass. Katrina took the blame this time. We should beg to differ. The hurricane was merely a convenient scapegoat for an entire culture that has blurred the lines between relief of suffering and killing. As one evacuated patient stated, "How can you say euthanasia is better than evacuation? Let God make that decision."12

- 1 Fink, Sheri. "Strained by Katrina, a Hospital Faced Deadly Choices." *The New York Times*, August 30, 2009, http://www.nytimes.com/2009/08/30/magazine/30doctors.html?scp=1&sq=stranded%20by%20katrina,%20a%20hospital%20faced%20deadly%20choices&st=cse (accessed April 7, 2011).
- 2 Ibio
- 3 Ibid
- 4 Ibid.
- 5 Ibid.
- 6 Ibid.
- 7 Ibid.
- 8 Ibid.
- 9 Ibid
- 10 Hafferty, Frederic W., and Brian Castellani. "The Increasing Complexities of Professionalism." Journal of the Association of American Medical Colleges 85, no. 2 (February 2010), http://journals.lww.com/academicmedicine/Fulltext/2010/02000/The_Impact_of_U_S__Medical_Students__Debt_on_Their.31.aspx (accessed April 4, 2010).
- 11 Foster, Mary. "New Legislation Pleases Doctor Accused of Murder." Committee for Disaster Medicine Reform. http://www.cdmr.org/ (accessed April 7, 2011).
- 12 Fink, Sheri. "Strained by Katrina, a Hospital Faced Deadly Choices." The New York Times, August 30, 2009, http://www.nytimes.com/2009/08/30/magazine/30doctors.html?scp=1&sq=stranded%20by%20katrina,%20a%20hospital%20faced%20deadly%20choices&st=cse (accessed April 7, 2011).

FROM THE DIRECTOR'S DESK, CONTINUED

Parza Comstat Cumingham

engenders respect for the particular dignity of women, women's bodies, and women's health. As we network with bioethicists and others of good will around the world who share our commitments, we invite you to join our exploration.



2 Teresa Streckfuss, "It's about Love," in Melissa Tankard Reist, Defiant Birth: Women Who Resist Medical Eugenics (North Melbourne: Spinifex, 2006), 100.

BABY-MAKING, CONTINUED

brother. They asked for specific hair, eye and skin color. They wanted him to be heterosexual so they could have grandchildren.

Next, when the doctor offered mathematic or musical enhancement, Marie jumped at the chance: "Oh, Anton. Choir!" With reluctance they admitted they could not afford the enhancement. Once they started down the path of their assisted reproduction project, the only barrier restraining them was financial. Despite their desire to keep some semblance of natural conception by leaving a few traits to chance, the doctor genetically engineered the embryos to pick "simply the best of you."

Before they knew it, they were complicit in the destruction of 75% of the embryos they commissioned. Marie's final question—*What will happen to the others?*—highlights the reality of IVF and the moral status of the embryo. Although perfectly healthy, they were, after all, as the technician smugly phrased it, "merely human possibilities." We are left with the implication that the embryos will be destroyed.

GATTACA is simply a more sophisticated refinement, based on advances in technology, of the reproductive model we are introduced

to in Brave New World.

B. BRAVE NEW WORLD OR 1984? THE SEEMING UTOPIA VERSUS ORWELL'S DYSTOPIAN PARADOX

Aldous Huxley's *Brave New World* is frequently paired with George Orwell's *1984*. The contrast is painted in dichotomous terms, Huxley's seeming utopia providing a calming alternative to Orwell's dark dystopia. During the World War II era and the Cold War which ensued, critics chose Orwell's scathing parable of totalitarian control as the more accurate parable. When threats of the "Red scare" subsided and the soothing technology of personal choice and comfort exploded, Huxley's drug-induced happiness resurged as prophetically accurate.

I suggest that both Huxley and Orwell were right. Huxley captured the spirit of the biotechnological age, and Orwell painted the grim underbelly of totalitarian opportunism and control.

David Rogers' stage version of *Brave New World* tersely highlights the stark realities of a world of controlled reproduction. In this world, there is guaranteed perfection. There are "no mistakes." As the various

characters explain the Bokanovsky Process, we learn that women "voluntarily" offer their ovaries for egg harvesting, "for the good of society." They are compensated with a sixmonth bonus.

The process proceeds along several models:

- There is the one-of-a-kind embryo produced for the highest castes, the Alphas and Betas.
- The lower castes are mass produced through the Bokanovsky Process. Huxley suggests a kind of "super cloning" process, where as many as 96 identical embryos are produced.
- All the embryos, and later fetuses, are bathed in chemicals designed to bring out the correct traits.
- The chemical conditioning before "decanting" (the word "birth" is an obscenity) continues afterwards through Hypnopaedia. Continual repetition, beginning at the toddler stage, reinforces each child's desires to conform precisely to the role appointed for his or her caste.
- Only 30% of the females are allowed to develop normally. The rest are sterilized.

Their infertile state reflects the "progress" that "has brought us out of the realm of slavery to nature," the Director proudly proclaims.

Indeed, sex is completely severed from procreation. Sex is for pleasure. Sex is with everyone. Sex is for social stability, by ensuring that no one becomes uniquely attached to someone else.

Today, we have severed sex from marriage, and marriage from procreation. Sex is an expression of personal preference, power, or pleasure. Procreation of children, the "natural way," is still the ideal. But, for those who spent their fertile years on pleasure, reproduction is possible through ART, through "baby-making."

II. THE ADVENT OF BABY-MAKING

A. DESCRIPTION OF THE PRIMARY ART METHODS

Let's take a quick tour through the primary ART methods. The oldest is also the lowest tech. Artificial insemination by husband, or AIH, involves the collection of sperm and transfer to the uterus for fertilization and implantation. A line could have been drawn here. But, this narrow use expanded to include AID, or artificial insemination by

donor, using donor sperm, usually from an anonymous donor, but not always.

Female infertility can be treated with medication. There are a variety of drugs that have different mechanisms of action to cause the female to produce eggs. Surgical procedures may be used to remove tissue, reverse a prior sterilization, or open a blocked Fallopian tube.

If medication and surgery do not work, the couple may attempt *in vitro* fertilization. The woman must take chemical hormones to cause her ovaries to release many more eggs than normal. The mature eggs are harvested through a laparoscopic procedure. Then, the male sperm must be retrieved. They are mixed with eggs in a petri dish, and the hope is that several eggs will fertilize. From one to six days later, one or more of the embryos is transferred to the woman's uterus where implantation may occur.

If sperm does not successfully penetrate and fertilize the egg, sperm can be injected directly into the egg via ICSI, or intracytoplasmic sperm injection.

Where a woman is not able to carry a pregnancy, the couple may seek a gestational surrogate. A surrogate can be altruistic, that is, she is not doing it for the money. She usually desires to help a family member or friend. One vivid recent example is Jaci Dahlenberg, who gave birth to her triplet granddaughters.

Surrogates can also be commercial, that is, they receive some compensation. Because of legal and cultural barriers against baby selling, the arrangements are usually structured as payments for her medical care and delivery, plus compensation for her time and suffering.

In both altruistic and commercial gestational surrogacy, the woman is the biological mother of the baby or babies she gestates. In some cases, she may be the *genetic* mother as well, agreeing to have her own eggs inseminated with the sperm of the contracting male partner. This is becoming less and less common, as women tended to get attached to babies who shared 50% of their DNA.

Most of these methods involve at least one "third party," such as a doctor. Some of these ART methods inevitably involve third-party gametes. I'll say more about that later.

B. HOW DID WE GET HERE? A LEGAL AND CULTURAL REVIEW

We must take the time to stop and reflect on where we are. That was precisely what the Resident World Controller, Mustapha Mond, does not want to happen in the *Brave New World*, when he intones "Mindless pleasure, love without emotion, supreme serenity . . . and best of all . . . there is no time to think!"

Contraception

The story in law and policy begins with two Supreme Court cases, *Griswold v. Connecti-*

cut (1965) and Eisenstadt v. Baird (1972). In Griswold, the Supreme Court struck down a neverenforced Connecticut law prohibiting the distribution, advice about, or use of, contraceptives, even by married couples. The Court questioned whether we

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would "allow the police to search the sacred precincts of marital bedrooms for telltale signs of the use of contraceptives?" The Court concluded that the law violated the right of marital privacy.

A line could have been drawn there, but it did not hold. This was the era of hippies, free love and the birth control pill. In 1972, the Court did an about face on its statement about marital privacy. It ruled that "If the right of privacy means anything, it is the right of the *individual*, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child."²

Abortion

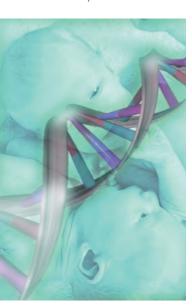
It was but a short step from the right to use birth control to *prevent* a pregnancy, to the right to abortion to *end* a pregnancy. Just one year later, in *Roe v. Wade*, the Supreme Court ruled that a woman's constitutional right of privacy encompasses her right to choose to terminate unwanted pregnancy. When read with *Doe v. Bolton* (the other case the Court decided the same day) as the Court explicitly directed, the privacy right was exposed as essentially a right to abortion throughout

pregnancy for virtually any reason.

The right not to continue a pregnancy implies a right to control not just the spacing and timing, but also the *fate* of one's own offspring. An important feature of the parent-child bond was fractured.

IVF

Just five years after *Roe*, the first "test tube baby" was born. Louise Brown, born in 1978,



was produced from her mother's and father's gametes, mixed via in vitro fertilization. The embryo was placed in Lesley Brown's uterus, below her blocked fallopian tube. The world celebrated Louise's seemingly miraculous birth. What was perhaps less well-known was the price of her birth. Over eighty embryos were created and transferred into

wombs, and all of them died. "Happiness must be paid for," Mustapha Mond reminds us near the conclusion of *Brave New World*. Lesley and John Brown's happiness was paid for with research that did no good for at least 80 unborn children. Good and noble goals sometimes have a high price. The question we should all be asking is whether that price was worth paying.

Cryopreservation

In another significant development, researchers figured out how to cryopreserve, or freeze, human embryos. This meant that when an abundance of harvested eggs produced "excess" embryos, they could be frozen for future use. Another technological hurdle overcome, another line crossed. The first birth from a frozen embryo occurred in 1983.

By this time, "baby-making" involved anonymous men to donate sperm, technicians to harvest and inspect eggs, fertilize and inspect embryos, and doctors to transfer embryos into wombs. Society did not draw the line at providing material or technical assistance. After all, we reasoned, women who were infertile due to blocked tubes could have their tubes unblocked or

bypassed. What about the woman with an inhospitable womb? Should she be barred from parenthood?

Surrogacy

Enter the case of Baby M, born in 1986 to Mary Beth Whitehead. Mrs. Whitehead was inseminated with sperm from William Stern. William Stern's wife, Elizabeth, was not infertile. She had multiple sclerosis and did not want to incur any health risk from pregnancy. So, the Sterns commissioned Mary Beth Whitehead to be their gestational surrogate. Problems arose when Mary Beth became attached to her baby and refused to give up Baby M. A legal battle, naturally, ensued. Just who was Baby M's "real" mother, anyhow?

In a solomonic decision, the New Jersey Supreme Court declared "payment of money to a surrogate mother illegal, perhaps criminal, and potentially degrading to women." The court awarded custody to Mr. Stern, and visitation rights to Mrs. Whitehead. When she turned 18, Baby M terminated Mary Beth Whitehead's parental rights, and Elizabeth Stern adopted her.

The Baby M case was an illustration of "too many parents." The next legal battle was over "not enough." The first courtroom battle over frozen embryos was fought in 1992 in *Davis v. Davis.*⁴ Mary Sue and Junior Davis tried to have children via IVF, without success. Before the final attempt, Mary Sue's doctor became aware of cryopreservation, and froze the embryos that were not transferred to her womb. The attempt failed, and so did the marriage. Mary Sue couldn't save her marriage, but she wanted to save her children, by donating the embryos to someone else. Junior opposed the idea. They went to court, and Junior Davis won.

The Tennessee Supreme Court balanced Mary Sue's interest in donation against Junior's interest in avoiding parenthood.

Refusal to permit donation of the preembryos would impose on her the burden of knowing that the lengthy IVF procedures she underwent were futile, and that the preembryos to which she contributed genetic material would never become children.... [But] If she were allowed to donate these preembryos, he would face a lifetime of either wondering about his parental status or knowing about his parental status but having no control over it.... Donation, if a child came of it, would rob him twice -- his procreational autonomy would be defeated and his relationship with his offspring would be prohibited.⁵

The Court decided that the embryos were actually "preembryos" and entitled to "special respect." This legal status placed them above human tissue, but below human persons. Because the Davises did not have a prior agreement about their embryos, Junior Davis's wishes should prevail. *Davis v. Davis* did not stop or even slow down the freezing of embryos. No one has kept good track, but within fifteen years, an estimated one-half million embryos resided in liquid nitrogen tanks at various clinics around the US.

The Cultural Revision Is Complete

From diaphragms for married couples to paid surrogates to frozen embryos, no legal lines held. In less than one generation, we moved from demanding "sex without children" to "children without sex."

In 1972, Paul Ramsey predicted the trajectory of assisted reproduction, six years before *in vitro* fertilization succeeded. Nearly thirty years later, Gilbert Meilaender noted the fulfillment of Ramsey's prophetic insight that ART would be "less likely to treat and remedy a medical problem than to provide the desired product by other means." Those "other means" included the use of donor sperm, creating a curious kind of social myopia. Meilaender has written poignantly about this twist of events:

When we turn procreation into reproduction, disaggregating its parts, we create difficulties for ourselves that we do not always want to acknowledge The man who fathers a child because of a one-night stand will be held legally responsible to support that child throughout his minority. "But if a college student visits the local sperm bank twice a week for a year, produces a dozen children, and pockets thousands of dollars, he can whistle his way back to econ class, no cares, no worries." Thus, Kay Hymowitz notes, "by going to a sperm bank, women are unwittingly paying men to be exactly what they object to." (emphasis mine)

The irony here would be funny if it did not reflect our serious moral predicament. It is almost as if modern reproductive technology allows us to realize our deepest desires and wants without any moral strings attached. Of course, we are deceiving ourselves, but does anyone even care? "And, [Ramsey] wondered, if medicine makes this turn to "doctoring *desires*," then

is there any reason for doctors to be reluctant to accede to parents' desire to have a girl rather than a boy, blond hair rather than brown, a genius rather than a lout, a Horowitz in the family rather than a tone-deaf child, or alternatively, a child who because of his

idiosyncrasies would have a good career as a freak in the circus?8

This sounds a lot like the scenario at the Eighth Day Center in *GATTACA*, where Anton and Marie select various characteristics for their future child.

Before moving from the legal and cultural shift to what was happening in the church, let's stop and examine what is known about the consequences of ART, particularly IVF. It has impacted women's health, pregnancies, and the child's health, and has psychological and sociological repercussions.

C. CONSEQUENCES OF ART

1. Health Risks

a. For the Woman and Pregnancy
The woman may incur risks of injury and infection from the procedure itself. She is also vulnerable to longer term risks from the fertility drugs, and a possible increased risk of breast cancer. She may experience Ovarian Hyperstimulation Syndrome (OHSS), which can be serious and is incurable. One recent study from the Netherlands suggests that the risk of death from OHSS is underreported worldwide. There is a possible increased risk of ovarian cancer, but the time frame for the cancers to have emerged is too short, and adequate studies have not been done.

The most commonly used drugs are not even approved by the FDA for this purpose. Lupron, a popular one, is designed for prostate cancer, and its risks for women's health have not been assessed.

The woman may also have a riskier pregnancy. With IVF, there is a higher risk of multiples and twinning, which increases health risks for the mother. The risk of multiples is reduced with eSET, elective single embryo transfer, but it is unknown whether there is a higher risk of identical twinning from the single embryo.

b. For the ART-Produced Offspring
Because a child conceived via IVF is also
more likely to be a twin or triplet, they are at
higher risk of prematurity, low birth weight,
and infant death. Prematurity has been
associated with higher incidence of complications and birth defects. Even singleton
babies are at a higher risk of prematurity, low
birthweight, and perinatal mortality.¹⁰

There have been reports of a risk of genetic malformation, but no prospective studies have been done. *The New York Times* reports the possibility of genetic defects, "including a

hole between the two chambers of the heart, a cleft lip or palate, an improperly developed esophagus and a malformed rectum."¹¹

c. Concerns over Use of Donor Gametes
There are additional risks if donor gametes are used. Genetic disease may have been passed on by the sperm donor. Most donors are anonymous, so there is no way to confirm or track the disease. This can have tragic consequences. Four families had five children with the same rare disease, a severe immune disease that occurs only 1 in 5 million times. All went to the same sperm bank in Michigan, and all used the same sperm donor.

Even if the donor *wants* to communicate health information, it is nearly impossible to do so. No regulations require this kind of record-keeping. A few years ago, a Chicago mother tried to contact families who had used her college daughter's eggs for IVF. Her daughter later died of colon cancer, and this would have been important health information for her genetic offspring to know.

It made me feel strange
to think that my genes
were spliced together
from two people who
were never in love, never
danced together...

2. Implications

a. For Society

The use of donor egg, sperm, and surrogates has generated a social rearrangement of the meaning of family. A child can be produced with upwards of five parents. An infertile couple may commission the creation of an embryo with donor egg and sperm. Or, if the woman does not have good cytoplasm in her own eggs, she can use a donor egg for that, while she supplies the rest of the cellular material and DNA. The embryo may be gestated in the womb of a fifth person. If they create multiple embryos and then freeze some, the resulting embryos may be donated to yet another couple, who in turn could hire

yet another surrogate.

If the arrangement breaks down anywhere along the way, who is the "real" parent? Unlike *Brave New World*, "parent," "mother" and "father" are not "smut." However, those names no longer stand on their own. The adults involved in the child's creation may be called:

- Genetic parent
- Commissioning couple (people who pay for egg or sperm)
- · Contracting parent
- Intended parent
- Social parent
- Gestational parent
- Biological parent

Sometimes, couples who have used IVF with cryopreservation may find that they are like the old woman in the shoe, who had so many embryos she didn't know what to do. Some choose to relinquish them to another couple to gestate and raise through an arrangement called embryo donation and adoption.

Thus, a child could have full genetic siblings, whose lives all started on the same day, with birthdays years apart, and who live with another family.

Psychologists are beginning to express concern about these social rearrangements of the family. The use of third-party gametes severs the connection between marriage, sexual intercourse and procreation. Lines of kinship are blurred and confused when a third party intrudes into the procreative relationship. When those children grow up, they may have a different view of how well the adults' decisions worked out for them.

b. For the ART-Produced Offspring
A question we need to ask of ourselves
and our society has not been satisfactorily
answered. Is this in the best interests of children—to be conceived and gestated this way?

The availability of ART opens the door to the possibility that the embryos are used as means to achieve parental goals, not for their own sake. There is a strong drive to have "a child of my own." It is a powerful biological drive, and it is good and necessary for our continuity with the past, and our sacrifice for our children and future generations. But, it can lead us down a path of *de-humanizing* human embryos. Listen to the language we use: "spare embryos," "leftover embryos," "grade A eggs," "defective embryos." These are labels for products, not children.

Regardless of the intent of any specific couple, the cumulative effect of ART is the commodification of children. In practice, market values apply. "Quality egg donors"—the Ivy League coed with high SAT scores, blonde hair, blue eyes, mathematical and musical skills, and good health—command a higher price than the immigrant who spends her days taking care of someone else's children. Her eggs might be used for research, where they are just a shell for inserting DNA.

Designer Children—A Story

Begin with two loving parents of a child with a rare, incurable disease that can only be treated with a bone marrow transplant. Determine that parents and family are incompatible donors. Search for suitable donors. Find none. Agree to have another baby to create a perfect match sibling. Fertilize eggs. Genetically test the embryos. Fail to get pregnant, and try again. Four times. Create fifteen embryos. Find two that are a perfect match. Successfully implant one. Discard the rest, including the healthy ones that did not match. Rejoice at the birth of a bouncing baby boy whose cord blood saves his sister. See the happy family. *The End.*

You may recognize the story of the creation of Adam Nash, whose sister Molly was born with Fanconi anemia. Adam was specifically created as a "savior sibling," an involuntary donor to save his sister. We can celebrate Molly's restoration of health, while lamenting the means used to achieve it.

IVF can also be used to have a child of the "right" sex. In many cultures, that sex is male. Let me tell you another story. A couple in India employed ART. She was 57 and he was 72. She gave birth to twin girls, and abandoned them. Their only goal was to produce a son. At least she didn't abort them or kill them after they were born.

ART from the Child's Perspective

We have had longer experience with sperm donors than with egg donors, and many of their offspring have reached adulthood. Some of them are not quite as happy as the pictures on the website promoting IVF would lead you to believe. "I found out my biological father was a vial of frozen sperm labelled 'C11' when I was 21." This person published their story on the AnonymousUs website. We will call them Colby.

Elizabeth Marquardt, who published the 2010 study "My Daddy's Name Is Donor," concludes:

Our culture needs a serious debate about the implications of technologies used to form many of today's alternative families, one that places the interests of the resulting children front and center....

Right now, this debate is dominated by talk of adults' rights—the rights of same-sex couples, the rights of infertile adults, the rights of singles who wish to have a child. ... Our culture also needs to face up to the importance of mothers and fathers in our children's lives. ... We cannot assume that they easily forget about those biological parents on the margins just because the adults in their lives want them to (emphasis added). 12

Marquardt is referring to gamete donors when she writes of "those biological parents on the margins." Keep that in mind as you hear the rest of Colby's story.

I couldn't relate to my story. I am a human being, yet I was conceived with a technique that had its origins in animal husbandry. Worst of all, farmers kept better records of their cattle's genealogy than assisted reproductive clinics had kept for the donor conceived people of my era. It also made me feel strange to think that my genes were spliced together from two people who were never in love, never danced together, had never even met one another. . . .

At the time these thoughts were incoherent, but I believe they basically boiled down to this.

"How could my own parents decide to deliberately separate me from my kin, to grow up half blinded to my own identity? If they couldn't face telling me the truth about what they had done, why did they do it?"

"How could the doctors, sworn to 'first do no harm' create the system where I now face the pain and loss of my own identity and heritage?"

"How could the government, charged with protecting the most vulnerable members of the community, its children, legislate to make it illegal for me to know the identity of my biological father? How can its institutions subject me to the psychological torture of knowing that records exist, but I am forbidden to know the contents?"

"How could my donor help create me, and then abandon me without even leaving his name?"

For me, the hardest thing about being donor conceived was the powerlessness and lack of choice - being constantly reminded that I must abide by decisions made long ago. Hang on a minute, I never agreed to any of this!¹³

The adults' autonomy and choice is highly protected in law. The embryos they produce have no protection until birth, and limited choice when it comes to uncovering their genetic heritage. It's ironic that in this age

of genetic determinism, the conviction that our genes are responsible for everything, that some of us are denied information about half of our genetic identity.

There are more historical threads to this review. They reach back before the 1960s, back to the early part of the 20th century. These threads are being woven into the history of the 21st century, more subtly and disguised more attractively.

. . .

The final part of this essay will appear in the upcoming Summer issue of Dignitas.

- 1 Griswold v. Connecticut, 381 U.S. 479, 485 (1965).
- 2 *Eisenstadt v. Baird*, 405 U.S. 438, 453 (1972) (emphasis in original).
- 3 In re Baby M, 537 A.2d 1227, 109 N.J. 396 (N.J. 1988). The court went on to note that "The long-term effects of surrogacy contracts are not known, but feared -- the impact on the child who learns her life was bought, that she is the offspring of someone who gave birth to her only to obtain money; the impact on the natural mother as the full weight of her isolation is felt along with the full reality of the sale of her body and her child; the impact on the natural father and adoptive mother once they realize the consequences of their conduct."
- 4 Davis v. Davis, 842 S.W.2d 588 (Tenn. 1992)
 - ld. at 604.
- 6 Gilbert Meilaender, Neither Beast Nor God: The Dignity of the Human Person (New York, Encounter Books, 2009), 35.
- 7 Ibid., 32. See Kay S. Hymowitz, "The Incredible Shrinking Father," *City Journal*, 17, no. 2 (Spring 2007), http://www.city-journal.org/html/17_2_artificial_insemination.html (accessed June 2, 2011)
- 8 Paul Ramsey, "Shall We 'Reproduce?" The Journal of the American Medical Association 220, no. 1 (1972), http://jama.ama-assn.org/content/220/10/1346.short (accessed June 2, 2011), quoted in Gilbert Meilaender, Neither Beast Nor God: The Dignity of the Human Person (New York, Encounter Books, 2009), 35-36.
- 9 D. D.M Braat et al., "Maternal Death Related to IVF in the Netherlands 1984–2008," *Human Reproduction* 25, no. 7 (2010): 1782-1786.
- 10 F. Olivennes, R. Fanchin, N. Lédée, C. Righini, I.J. Kadoch and R. Frydman, "Perinatal Outcome and Development Studies on Children Born after IVF." *Human Reproduction Update* 8, no. 2 (2002): 117-128.
- 11 Gina Kolata, "Picture Emerging on Genetic Risks of IVF." New York Times, February 16, 2009, under "Heath," http://www.nytimes.com/2009/02/17/health/17ivf.html (accessed June 1, 2011).
- 12 Elizabeth Marquardt, "My Daddy's Name Is Donor: A New Study of Young Adults Conceived Through Sperm Donation," *Chicago Tribune*, May 15, 2005, republished at http://www.americanvalues.org/html/donor.html (accessed June 1, 2011).
- 13 Anonymousus.org, "Jaws of Life," http:// anonymousus.org/stories/story.php?sid=1413 (accessed June 1, 2011).



MARK ALHAJJ

As a recent graduate of Taylor University, I entered the bioethics program due to my interests and aspirations of working as a clinician. Originally from a Middle Eastern background I have engaged in many global issues and have

grappled with questions dealing with diversity, equality, and justice. Because of this background and my enthusiasm about entering the medical field, I have developed a strong passion for global health and clinical ethics.

I consider it an honor to have the opportunity to intern with CBHD as a Brown Scholar. Through working on various projects with the Center's staff, furthering archival organization, and helping with website development, I have learned a great deal. Additionally, this year I was an intern at an HIV clinic in the city of Chicago, which opened my eyes to practical aspects of bioethics, connecting with my studies in the degree program and my work at the Center. Through these experiences and the versatility of the MA program at Trinity, my passions have further developed, and I feel prepared to engage these issues as I continue my education and professional career.

Upon completion of the MA program this summer I will attend Physician Assistant school at Marquette University, where I will complete my clinical and professional training. I look forward to learning more and continually engaging in these issues in my training and beyond. I know where my strong foundation can be found and understanding

the network of wisdom, support, and help that I will always have through the Center.



LUKE COLLINS

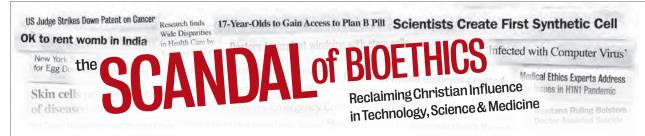
Last May I graduated from Taylor University with a BA in Biology/Pre-medicine and minors in Spanish and Chemistry. I was able to spend two semesters abroad, in Ireland and Ecuador respectively, and my primary research was on

the micropropagation of deciduous azalea tissue. It was also my privilege to teach MCAT preparation courses both at Taylor University and in Indianapolis.

Bioethics became a primary focus after volunteering at the Fundacion Hogar de Cuenca in Cuenca, Ecuador, and while taking a number of philosophy and theology undergrad courses. It became clear to me that the best physician has both a deeply rooted character *and* is able to integrate experiences with meaningful foundations of thought.

CBHD equips people to engage cutting edge issues at the highest level possible. This internship has been one of the most valuable experiences for someone in my position.

It is my hope that those attending this year's summer conference will actively seek out and mentor our newer members. Passing on wisdom and support is essential for developing an effective and healthy community. The relationships I have started to build at the Center will enhance my development as a physician and as a servant of Christ.



Has Christian Bioethics Made a Difference?

Has 'Christian bioethics' made any difference in the past forty years? Can bioethics be Christian? How do we reclaim influence in the bioethics arena? What would successful Christian 'influence' even look like?

Join US for The Center for Bioethics & Human Dignity's 18th Annual Summer Conference, *The Scandal of Bioethics*. Take this opportunity to boldly reengage the pressing bioethical issues of our day from distinctly Christian perspectives.

Speakers include: H. Tristram Engelhardt, Kevin T. FitzGerald, Dennis P. Hollinger, Edmund D. Pellegrino, David Stevens, and Daniel P. Sulmasy.

July 14-16, 2011
TRINITY INTERNATIONAL UNIVERSITY DEERFIELD, IL cbhd.org/scandal

In partnership with Christian Medical & Dental Associations and Nurses Christian Fellowship



TOP BIOETHICS STORIES: JANUARY—MARCH 2011 EDITION

BY APRIL PONTO, Research Assistant

1. "Montana OKs Physician-Assisted Suicide" by Alix Spiegel, *National Public Radio*, January 1, 2011.

Montana is in line to become the third state to permit physicians to assist terminally ill people who wish to end their lives. The Montana Supreme Court ruled Thursday that there is nothing in state law to prevent physicians from prescribing lethal drugs to mentally competent, terminally ill patients. (http://tiny.cc/ds4no)

Currently, Oregon and Washington are the only states that allow the highly controversial practice of physician-assisted suicide. In the case *Baxter v. Montana* the plaintiffs asked the court to establish the constitutional right for a physician to provide aid for the dying. The Montana Supreme Court ruled in January that there is no state law that would prevent doctors from prescribing medications to end the life of a patient.

2. "Retracted Autism Study an 'Elaborate Fraud,' British Journal Finds" by the CNN Wire Staff, *CNN*, January 5, 2011.

A now-retracted British study that linked autism to childhood vaccines was an "elaborate fraud" that has done long-lasting damage to public health, a leading medical publication reported Wednesday. (http://tinyurl.com/29qrdtl)

The major study which linked autism to childhood vaccinations has been debunked following an investigation by the *British Medical Journal* (BMJ). The investigation found that Dr. Andrew Wakefield, the study's author, falsified his research and received money from a law firm that intended to sue the manufacturers of the vaccine.

3. "France's First 'Saviour Sibling' Stirs Ethical Debate about Biotechnology" by Joseph Bamat, *France 24*, February 9, 2011.

France's first so-called "saviour sibling" was born in a hospital in the Parisian suburb of Clamart in late January, doctors announced Tuesday. The baby, whose blood stem cells will help cure one of his siblings from a severe genetic blood disease, has also opened a new front in the bioethics debate in France. (http://tinyurl.com/5vkfpnh)

In February the first 'savior sibling' was born in France with the purpose of curing his older sister of a genetic blood disorder. The child, who did not have the blood disorder, was plucked from a dozen other fertilized

embryos and implanted in his mother's womb. Upon birth, the child's umbilical cord was used to cure his older sister of the disease. The French government has allocated 800,000 euros for the continuation and development of this practice and the child's parents plan to replicate this procedure for their other son affected by the blood disorder.

4. "Woman, 61, Gives Birth to Own Grandchild" by Deborah L. Shelton, *Chicago Tribune*, February 11, 2011.

Almost 39 weeks ago, Kristine Casey set out on an unusual journey to help her daughter and answer a spiritual calling. Her goal was achieved late Wednesday when she gave birth to her own grandson at age 61. Casey, possibly the oldest woman to give birth in Illinois, served as a surrogate for her daughter, Sara Connell, who had been trying for years to have a baby. (http://tinyurl.com/4m37dep)

Kristine Casey, 61, became the surrogate carrier for her daughter and son-in-law who were unable to have children. Though post-menopausal, Casey, was able to give birth to her grandchild through hormone supplementation.

5. "White House Revises Bush-Era 'Conscience Clause'" by Michele Norris and Julie Rovner, *National Public Radio*, February 18, 2011.

Today, the Obama administration waded back into the controversy over abortion. It issued new rules related to what's called the Conscience Clause. The rules are intended to strike a balance between the rights of doctors and nurses not to perform procedures that violate their beliefs and the rights of patients to obtain medical care. (http://tinyurl.com/4e790hh)

In its final hours the Bush administration passed regulations known as the conscience clause that permit medical professionals to exercise their conscience when confronted with controversial medical issues. The Obama administration has now announced restrictions to this clause that will narrow the conditions under which medical professionals can object to certain medical practices.

6. "Giving Life after Death Row" by Christian Longo, *The New York Times*, March 5, 2011.

According to the United Network for Organ Sharing, there are more than 110,000 Americans on organ waiting lists. Around 19 of them die each day. There are more than 3,000

prisoners on death row in the United States, and just one inmate could save up to eight lives by donating a healthy heart, lungs, kidneys, liver and other transplantable tissues. (http://tinyurl.com/6x9sho8)

Christian Longo, an inmate on death row in Salem, Oregon, desires to donate his organs after he is executed. Currently there is no law prohibiting this, but there are no prisons which allow such practice. If permitted, Longo would be the first death row prisoner to donate his organs.

7. "3-Parent Babies Could Be Conceived in UK Next Year" by NewsCore, Fox News, March 11, 2011.

The treatment involves merging DNA from two fertilized eggs, so that malfunctioning mitochondria are replaced by healthy ones. As mitochondria contain small amounts of DNA, a child conceived that way would inherit genetic material from three parents, though 99.8 percent would be from the mother and father. (http://tinyurl.com/6xt3md3)

A team of scientists from Newcastle University have introduced an IVF technique that merges two fertilized eggs for the purpose of replacing faulty mitochondria. The result is a child born with the DNA of three parents (chromosomal DNA from the nuclei of the egg and sperm, and mitochondrial DNA from the donor egg). Though this procedure is currently outlawed in England, Parliament is now considering revising this law.

8. "Joseph Maraachli: End-of-life Row Tod-dler Moved to US," *BBC News*, March 14, 2011.

Parents of a terminally ill Canadian boy have transferred him to a US Catholic hospital after an Ontario court ruled doctors could remove a breathing tube keeping him alive. (http://tinyurl.com/4huwdjp)

After a ruling in a Canadian court that allowed the withdraw of a breathing tube in a terminally ill infant, baby Joseph has been flown to Saint Louis to receive a tracheotomy that will prolong his life by approximately six months. His parents have requested this treatment so their child will not painfully choke to death after the removal of the breathing tube. The Canadian hospital where the infant was receiving treatment decided the tracheotomy was not medically necessary and disallowed the treatment.

updates & activities

FELLOWS

In April the Center hosted the inaugural gathering of our Academy of Fellows for a one-day confidential consultation. The gathering focused on strategic brainstorming, reflection, and discussion of future collaborative activities.

EDUCATION

In March CBHD hosted a special lecture, "Baby-Making: the Fractured Fulfillment of Huxley's *Brave New World*," delivered by Paige with a response by Trinity College professor Kristin Lindholm, PhD. The presentation was followed by an open Q&A session and reception. Faculty, students, staff, and community guests attended the evening event, which was also live-streamed through our website. The text of the address is the feature piece in this issue of *Dignitas*.

STAFF

PAIGE CUNNINGHAM, JD

- Presented a session for medical students in conjunction with a course taught by Drs. Sam and Elizabeth Hensley in Jackson, MS. Paige discussed embryo adoption and cognitive enhancement.
- Spoke on "Bioethics at the Beginning of Life: Reproductive Technologies and Choice" at Willow Creek North Shore in March.
- Traveled to Houston to present a lecture on "A Christian Perspective in Bioethics: Dignity and Early Human Life" at the American Chinese Fellowship.
- Submitted a co-authored chapter with Mike on "Exploitation in the Global Medical Enterprise" for the forthcoming volume Social Injustice: What Evangelicals Need to Know about the World (The Timothy Center Press).

MICHAEL SLEASMAN, PHD

 Co-delivered a presentation on "Medical Exploitation" with Paige at the North Central Regional Evangelical Missiological

- Society Meeting. He spoke specifically about research ethics and organ trafficking. She spoke on reproductive tourism and egg harvesting.
- Interviewed by WERC 105.5 Birmingham, AL on the Presidential Commission on Bioethics and human subjects research; Guatemala and other US Violations of Human Rights.
- Interviewed by Northwestern Media Radio in July on human enhancement and the Center's conference Beyond Therapy.

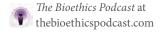
HANS MADUEME, MD, PHD CANDIDATE

 Spoke on "Genetics, Sin, and Addiction" at Willow Creek North Shore in March.

MEDIA RESOURCES







Everyday Bioethics Audio Series at everydaybioethics.org

Facebook Cause at causes.com/cbhd

NEW Facebook Page at facebook.com/bioethicscenter

in Linked-In Group at linkd.in/thecbhd

NEW YouTube at youtube.com/bioethicscenter

COMING SOON:

NEW STAFF HIRES & AN UPDATE ON OUR FIRST CONSULTATION OF THE ACADEMY OF FELLOWS

ON THE CBHD BOOKSHELF

For those interested in knowing what articles and books the Center staff have been reading.

ARTICLES OF NOTE:

Brook, Robert. "Is Choice of Physician and Hospital an Essential Benefit?" *The Journal of the American Medical Association* 305(2): 195-196.

Levy, Steven. "The A.I. Revolution." Wired 19(1): 88-89.

Liang, Bryan, and Timothy Mackey. "Direct-to-Consumer Advertising with Interactive Internet Media: Global Regulation and Public Health Issues." *The Journal of the American Medical Association* 305(8): 824-825.

Wynia, Matthew, and Thomas May. "Vaccinations: Individual Responsibility or Societal Obligation." *DeVos Medical Ethics Colloquy* September 2010. Transcripts of the proceedings are available along with other colloquy archives at http://www.devoscolloquy.org/events/archives.

ON THE BOOK SHELF

Bashford, Alison, and Philippa Levine, eds. *The Oxford Handbook of the History of Eugenics*. New York: Oxford University Press, 2010.

Brock, Brian. Christian Ethics in a Technological Age. Grand Rapids: Eerdmans, 2010.

 $Carr, Nicholas. \textit{The Shallows: What the Internet is Doing to Our Brains.} \ New York: W. W. Norton, 2009.$

Gaiser, Frederick. *Healing in the Bible: Theological Insights for Christian Ministry*. Grand Rapids: Baker Academic, 2010.

Kristof, Nicholas, and Sheryl WuDunn. Half the Sky: Turning Oppression into Opportunity for Women Worldwide. New York: Vintage, 2009.

Vandrunen, David. Bioethics and the Christian Life: A Guide to Making Difficult Decisions. Wheaton: Crossway, 2009.

Vaughn, Lewis. Bioethics: Principles, Issues, and Cases. New York: Oxford University Press, 2009.

Watson, Richard. Future Files: 5 Trends that Will Shape the Next 50 Years. Boston: Nicholas Brealey Publishing 2010

Winter, Richard. Perfecting Ourselves to Death: The Pursuit of Excellence and the Perils of Perfection. Downers Grove: InterVarsity, 2005. Leuven, Belgium: Peeters Publishers, 2004.

FICTION:

Card, Orson Scott, and Aaron Johnston. Invasive Procedures. New York: Tor Books, 2007