

Genetics and Social Location: How do things look from here?

Gathering

HYMN

83 “Jesu, Jesu, Fill Us with Your Love,” or #230 “I, the Lord of Sea and Sky,” in *This Far By Faith: An African American Resource for Worship*. (For additional suggestions see page 119.)

PRAYER

Holy Wisdom, giver of all life and source of all creating, we give you thanks that your Spirit moves throughout the world, transforming us and calling us to you. In faith and trust we bring to you our uncertainties, our fears, our questions, and our hopes. Free us in Christ for service to our neighbor as we dwell in your Word and listen for your Spirit. Guide us, we pray, in Christ’s name. Amen.



HEARING THE WORD

Galatians 3:23-29

DISCERNING THE WORD

Silence

Discernment

What did you hear in this reading? Is there a word of God for us here?

Introduction

Session summary

In this session, you are asked to reflect upon the significance of social location for assessing the ethical dimensions of genetic research and treatments. The focus will be upon communities of color and women of color. You will be asked to reflect upon your own social location and how it has shaped your ethical worldview.



Real life stories

Genetic research and technologies have many and varied potential implications for human beings and communities. Consider these contrasting examples:

1. Gustavo is a 20-year-old Mexican American who lives in San Diego. He and his friends were recently approached by police on a street corner and asked for a genetic sample from their cheeks via a swab. The police are looking for a rapist via a genetic match. Gustavo and his friends are all legal residents of the U.S., but they still felt intimidated by the police and submitted to the spontaneous request. As it turns out, all of them were confirmed to be innocent. However, their genetic records are now a permanent part of the San Diego police department database.

2. Sandra is an African American woman living in Minneapolis whose mother died of breast cancer. She knows that as a Black woman, she has a higher mortality risk from breast cancer than a white woman. She wonders if she has a genetic predisposition for breast cancer. However, she is afraid to have a genetic test because she is uninsured and it would be costly. In addition, if she has the test and finds out she does have the gene, BRCA 1, she worries if she will be able to get a job with benefits. It may be that the company’s insurance carrier will not cover her if she gets breast cancer—that they will consider



Paul is opposed to circumcision being the sign of God’s covenant with us in Christ because, as a mark in the flesh, it causes pride among those social groups who can receive it and estrangement among those social groups who can’t.

What pairs of social groups today might you add, who, despite Paul’s best efforts, are estranged from each other within the Christian church?

it either as a pre-existing condition or that they will simply not write a policy that covers breast cancer because they see her as a high risk.

3. Sam ranches on land that has been in the family since the 1850s, and Sam is committed to continuing to ranch. Sam has gone to Dr. Olsen who provides medical care for the entire family (spouse and sons). Lately, Sam has had uncontrolled shaking of his arms. He has fallen several times. After some tests, Dr. Olsen suspects Parkinson's Disease. Dr. Olsen recommends that Sam go to the city to have more tests. Sam and his family do not have health insurance and they have nothing to sell to pay for medical care. Sam does not want to sell the ranch. He wants to keep it in the family so his family and grandsons have a place to live and work. Therefore, Sam asks his doctor to keep this between them.¹

4. Maribel is a 28-year-old Puerto Rican woman living in Chicago who is newly pregnant and who receives some public benefits. She is excited to be pregnant. Maribel lives on the third floor of a walk-up apartment building. Her doctor suggested that she have early genetic testing done to ensure the health of the fetus. An amniocentesis showed that the fetus has a genetic abnormality, but the severity of any disabilities is not known and cannot be known until after birth. Her doctor asks her to consider what she will do if she decides to continue with the pregnancy and, upon birth, it is discovered that the child will not be able to walk. How will she be able to transport the child if a wheelchair cannot get up to her apartment? Maribel feels frightened, confused, and conflicted. She does not know her doctor well, but thinks he may be trying to steer her in the direction of having an abortion. She is not sure she trusts him.

The importance of context for considering genetics

Genetic research, therapy, and technology never take place in a vacuum; instead, they are always situated within specific contexts. In other words, when thinking about when or if to make use of genetics in medical care and research, we need to attend not only to scientific facts, but also to social ones. In a world where we do not love all neighbors equally, and where social relationships are permeated by racial-ethnic, socio-economic, and global health and healthcare disparities, attentive consideration of particular people, places, and contexts is integral to the process of moral deliberation.

Many multilayered questions and complexities surround genetic research and its applications, especially as they relate to communities of color and/or those of low-salaried socio-economic classes. Indeed, Christians need to reflect not only on the general question, "Will this genetic research or technology benefit humanity?" but also on specific and contextual ones such as, "*Which* lives will benefit? Are particular people/communities at risk of being left out or mistreated?" Racial, ethnic, and socio-economic class realities (both in the United States and around the world) all interplay within the field of genetics in complex and varied ways. In some potential uses, genetics may be a tool for greater health and equality in society. In others, it may only reinforce prevalent stereotypes, racial bias, and socio-economic inequalities.

As Christians, then, we have to ask some hard questions of ourselves and others: In what ways does one's social location shape how one perceives and values genetics and genetic research? Who stands most likely to gain from the benefits of genetic research? Given the health and healthcare disparities prevalent in communities of color, is genetics more likely to reduce or intensify those disparities? In what ways might genetic technologies open the doors to greater racial, gender, and class discrimination and stigmatization? How do we protect the rights of individuals and population groups who have experienced abuse by genetic research in the past? These questions related to social location may make some uncomfortable, but they are nonetheless central to our collective moral reflection. In fact, the reality that they are thorny and put us ill at ease is probably a good sign that they are all the more important to address!

Before delving into these questions, however, it may be helpful to come to some common understandings about the terms being used.

Social location

Social Location refers to the fact that human beings are “located” in a myriad of social relationships and identities that shape who they understand themselves to be, their values and aspirations, and their perceptions of others and the world they inhabit. Central aspects of one’s social location include: race/ethnicity; socio-economic class; rural or urban background; gender; educational background; sexual orientation; religious affiliation; mental/physical abilities; age; and nation or culture of origin. These combinations of identity, group memberships, and social relations affect a person’s or a community’s experiences, attitudes, assumptions, and beliefs (a.k.a. worldview).

For example, living in a large metropolitan area such as New York City, Chicago, or Houston is very different than living in a small rural town in Nebraska, South Carolina, or North Dakota. However, those who are poor in either the metropolitan or rural context are more likely to lack the economic and political means for gaining the full benefits of genetics and genetic research. For example, in one of the stories above, Sam has no health insurance and does not want to sell the ranch to pay for potential medical bills because he wants to give his grandchildren a place to live and work. So, taking advantage of medical resources in the city and potential genetic therapies that may become available would create a hardship on his family and extinguish his dream of keeping the ranch in his family. Like some ranchers and small farmers, Sam has to weigh the benefits of seeking state-of-the-art genetic research and future therapies versus providing for his family. Poor and disenfranchised communities in either rural or urban areas, especially those of color, have been most at risk of being negatively affected by medical research, and most often lack access to new therapies, as will be explored below.

The point is, then, that the particular lens through which a person or community tends to look out at the world, is profoundly affected by their social location. That said, it is important to note that no person or community is simply a “victim” or “powerless” in terms of their social location or can be neatly labeled “oppressor” or “powerful.” For example, a white professor in a classroom of undergraduates possesses significant authority and power *vis-à-vis* her students. However, that same professor does not enjoy the same innate privilege and power walking home alone at 9 p.m. on a street that is not especially well lit. Simply put, it is part of human life that in some contexts every human being experiences themselves in a position of power relative to others; while in different contexts, he or she experiences themselves as less powerful in relation to others.

Second, no person is “chained” to the social location into which they were born. While some of these identifications associated with social location are given, e.g., genetic make-up and place of birth, other aspects are open to at least some adaptation—they can be chosen, changed, or expanded upon, e.g., religious affiliation, linguistic background, and vocational identity. However, race, gender, and socio-economic class identities are not easy to change for most of us. And most of us know that we are immediately identified and categorized by these traits whenever we walk down the street, apply for school, interview for a job, or walk into a bank office. Whether we like it or not, people often make assumptions (for good or for ill) about others based on their skin color or clothing.

Finally, social location matters regardless of a person’s personal beliefs. For example, not everyone who is white believes black people are less intelligent and less hard working than white people. In fact, it is very possible that very few white people consciously subscribe to such beliefs. Yet, an individual’s beliefs actually have little to do with her or his access to privilege, power, and important institutions that govern our common life.² Independent of one’s actual conscious beliefs, it is social location that often grants or denies access to privilege and power. Furthermore, even if no one consciously holds stereotypical or prejudicial beliefs, it is still possible for institutions, organizations, and common practices to discriminate (even if unintentionally) against particular groups or populations.

Communities of color

With respect to social location, the use of racial/ethnic categories is sometimes seen as helpful and sometimes as not helpful. This is a difficult subject to discuss because, as

Social Location refers to the idea that human beings are “located” in many social relationships and identities that shape their self-understanding, values and aspirations, and their perceptions of others and the world. Examples of these relationships include race/ethnicity; socio-economic class; gender; religious affiliation; mental/physical abilities; and age.

Christians, we tend to strive to look beyond a person's racial/ethnic background, their gender, or their economic status and see them simply as a child of God. Unfortunately, we also tend to put all people who appear to have certain traits into one group without recognizing the uniqueness of the individual's or group's experience. For example, although they share racial background, one cannot put all African Americans on the North American continent together with all African Americans living in the Caribbean. Similarly, one cannot put Latino/Latina and Mexican American communities into one population group. While there may be commonality of language, there are different social experiences. The term, *communities of color*, refers to how historically disadvantaged racial/ethnic groups have named themselves.

In genetics, racial/ethnic categories are imprecise and difficult to define. Geneticists and genetic researchers support two views on the use of such categories. On the one hand, there are those who suggest that the use of racial/ethnic categories is not helpful in genetic research. They believe this type of thinking leads to misinformation about the human genome and can lead to further discrimination and stigmatization. On the other hand, there are those who suggest that the use of racial/ethnic categories is helpful in reducing health disparities. BiDil, a combination of two drugs, developed for African Americans suffering from heart disease, is an example of such research and has been met with mixed appraisals.³

It is important to understand that race and ethnicity are not biological realities. They are social realities. Genetic differences do not neatly line up with the racial categories we have constructed. An African American and a white person may share much of the same genetic makeup, and an African person from Ethiopia may have a different genetic makeup than an African American from the U.S. or the Bahamas.⁴ It is imperative that we neither ignore possible genetic clues for the diagnosis and treatment of disease, nor overuse genetics to explain the causes of illness and behavior while missing other key environmental and social factors such as stress, racism, poverty, exposure to environmental toxins, poor nutrition, etc.

In the ELCA's social statement, *Freed in Christ: Race, Ethnicity, and Culture*, racism was identified as a prominent environmental factor that shapes one's perspective on and experience of cultural developments. Let's consider, from recent U.S. and Caribbean history, how race/ethnicity and racism shape the experience of communities of color and impact their perspective on the use of genetic technologies.

Reasons for caution and mistrust—lessons from history

One of the incontestable facts of life in the United States and the Caribbean is that we live in a multiracial and multiethnic society. Increasingly, within this diverse society, communities of color experience the health care system in ways that are different from how most white Caucasians experience it, ways that shape their understanding and perceptions of rapidly developing genetic technologies. These experiences, each different, yet grounded in a common experience of abuse and racial/ethnic discrimination, create caution or mistrust of the goals and purposes of anything related to genetics. It is true that, for many in communities of color, genetic research does not figure prominently. However, they do experience the healthcare system, a field in which genetics is beginning to play a dominant role. This history lends vital context for understanding the roots of mistrust and caution among certain communities of color about genetics.

African American experiences

African American communities have a “both/and” perspective on the use of genetic technologies. Some believe that the federal government actively conducts unethical genetic research (especially on the prison population), and are less optimistic about genetic research. Yet, other African Americans are optimistic about the good of genetic research.⁵ Still, among African Americans, there are concerns about discrimination based on genetic information. These perspectives may have their roots in two major events: the United States Public Health Service (USPHS) Study of Untreated Syphilis in Negro Males in Macon County, Alabama and the Sickle Cell program initiated in the 1970s.

The USPHS Study has powerfully shaped how many people in the African American community view healthcare givers and researchers. From 1932 to 1972, this study used 399 poor African American males who had syphilis and 201 African American males free of the disease to observe the effects of untreated syphilis on the body. The participants were never informed that they had syphilis, resulting in a complete lack of informed consent. Rather, they were told they had “bad blood,” and were consistently denied effective treatment, i.e., penicillin, when it became available. Indeed, penicillin became the standard treatment for syphilis as early as the mid-1940s. The study only ended in 1972 because of a leak to the press and public outrage. Originally, the study was to last until “the last participant died.” Keep in mind that this study went on for 40 years! Not surprisingly, the long shadow of the USPHS study contributes to the caution and mistrust felt by many African Americans with respect to the federal government and the delivery of medicine and healthcare to African American people.⁶

Toward the end of the syphilis study, the federal government instituted a sickle cell screening program targeting the African American community. Prompted by the death of four African American Army recruits between March 1968 and February 1969, the President of the United States signed into law the National Sickle Cell Anemia Control Act. This bill authorized federal funds for screening, education, and research.⁷

There was some skepticism at the news that a health program had been instituted and funded by the federal government to address an unknown genetic disorder in African Americans. Some of this skepticism may be attributed to the way government physicians mistreated poor African American males in the United States Public Health Study of Untreated Syphilis in Negro Males. Some of the skepticism may also have come from the claim of a genetic disorder specific to African Americans, and some may be attributed to misinformation and misunderstanding about sickle cell disease (SCD) and sickle cell trait. For example, it was said that SCD affected only African Americans. This was far from the truth. SCD also affected persons from the Mediterranean and Africans on the continent of Africa. The proliferation of screening programs (today in all 50 states), though, was initiated to screen school children and those applying for marriage licenses for the sickle cell trait. Some members of the African American community perceived this as a way to restrain the reproduction of people who society considered to be unfit (sometimes called “negative eugenics”).⁸

For African Americans, then, concerns about racial discrimination and stigmatization were not completely unfounded. Initially, the U.S. Air Force denied African American recruits the opportunity to fly airplanes if they tested positively for the sickle cell trait. At the turn of the twenty-first century, the Armed Forces of the United States had a variety of policies related to sickle cell. Some branches tested (the Marines, Air Force, and the Navy) while the Army was reviewing its policy.

On the other hand, genetic research on sickle cells holds great promise for those affected by the disease. Consider this example: Keone Penn, a young African American male, suffered from sickle cell disease. His red blood cells would develop into a sickle rather than the normally round red blood cells. Keone had been hospitalized with chronic pain and a stroke. Since bone marrow could not be obtained from either his family or other donors, doctors tried an adult stem cell transplant from an unrelated umbilical cord. After this history-making surgery, Keone was declared cured of sickle cell disease.⁹ Nevertheless, the controversy over SCD and sickle cell trait points to various reasons why African Americans may have ambiguous feelings toward genetic technologies.

The experience of women of color

The issue of environmental factors may become clearer in the experiences of Latina women. These factors are clearly present in the area of reproductive choice and family planning. What is astounding is the striking similarity of the experiences of women of color with respect to their ability to control their own bodies, and the role of government, science, and medical practitioners in those experiences. The issues of sterilization and informed consent emerge out of the experiences of women of color related to genetics.

The use of sterilization has a long tradition on the North American continent and in the Caribbean. Among Latina women, this practice has been going on since WWI. Called “La Operacion,” this program, by 1965, had sterilized more than 20,000 Latina women in Puerto Rico. Aided by government funding, the medical establishment, and the local government in Puerto Rico, poor women became targets of those who wanted to control population growth. It was thought that controlling population through sterilization would help stem the economic crisis in Puerto Rico. Clearly some Latina women experienced sterilization as coercive; that is, doctors were able to legitimize this practice without the informed consent of the women. In other cases, Latina women sought the practice as a form of birth control because they had no other resources. Race and class influenced their reproductive choices.¹⁰

Many of the same dynamics involved in the mass sterilization of Latina women in Puerto Rico are evident among African American women on the North American continent. Sterilization served as a method of reducing the population, as a form of birth control, and as a way of controlling “promiscuous” behavior. This practice revived the eugenics argument because sterilization is a form of negative eugenics; that is, a method for prohibiting poor “undesirable” women from procreating. States were permitted to enact legislation that allowed sterilization of poor African American women.¹¹ Doctors and social workers could determine whether a poor African American woman needed sterilization. Moreover, involuntary sterilization was common throughout the South. A prominent woman of the Civil Rights Movement, Fannie Lou Hamer, suffered what came to be known as “Mississippi appendectomies,” that is, sterilization without their informed consent.¹² While there was involuntary sterilization, some African American women actively sought sterilization; however, they did so only because they had no access to other methods of family planning.

Sadly, such problematic proposals are not merely a thing of the past. In September 2008, a Louisiana State Legislator, John Labruzzo, was among those who floated the idea of paying poor women \$1,000 to have tubal ligation (“tube tying”) in an effort to combat the cycle of poverty and dependence on government aid, what he termed “generational welfare.” This proposal is ethically problematic because, instead of looking at the roots of cyclical poverty, it simply seeks to control reproduction of certain socio-economic classes—and by extension of certain racial-ethnic communities.¹³ In short, Latina and African American women may have more difficulty than others trusting healthcare providers around reproductive issues, due to socio-economic inequalities and/or racial-ethnic dynamics.

It is important to understand that poor women, especially those of color, have often felt caught in a system of healthcare where they had limited access to both adequate reproductive care and other healthcare resources when they needed them. In short, the larger story of medical research and development is one not only of progress, but also of inequality. Consider artificial reproductive technologies (ARTs) such as in vitro fertilization. It is largely the well-insured and generally wealthy who can afford such technology. It is not covered by all insurance plans and largely uncovered by public insurance programs such as Medicaid.

Global impact of medical research

Finally, it is important to note that questionable research and medical practices are not simply a lamentable part of North American and Caribbean history. There are reasons for concern even today. For example, the first AIDS drugs were tested on African peoples; however, African peoples have largely been excluded from benefiting from the approved drugs that resulted from these early trials. This reality is changing somewhat, but there are still huge drug and healthcare access disparities between the United States and Africa, or between the First World and the Two-Thirds World in general. Or, consider the fact that millions die every year of TB and Malaria, both preventable and treatable diseases that do not ravage the West, but which are endemic to much of Africa and Asia.

Simply put, most of the world does not benefit significantly from current medical

cures, treatments, and therapies that we enjoy in the United States. It is possible that genetic therapies will only deepen this health and wellbeing divide unless there is sufficient public demand for fair distribution across national borders.¹⁴ We Christians in the United States and the Caribbean need to reflect seriously on these facts and contemplate what is required in order to express authentic love of neighbor, and to seek justice among different people and nations.

Conclusion

The relationship between genetics and social location is a long one on the North American continent and the Caribbean. Environmental factors such as race, socio-economic class, politics, and gender shape how various communities of color view the contributions or non-contributions, the promise or threat of genetic technologies.

The ELCA's social statement, *Caring for Health: Our Shared Endeavor* (2003), suggests that healthcare is a "shared endeavor." The use of technology and research is both embraced and viewed with caution. The lessons of abuse experienced by communities of color call us to listen to and work with these communities in their pursuit of "being well."

Invitation to conversation, prayer, and action



QUESTIONS FOR DISCUSSION

- How does your own social location affect how you think about and view the prospects of genetic research and new technologies?
- Have you, or loved ones, ever had difficulty accessing United States healthcare? What obstacles did you/they encounter?
- Have you ever felt judged or stereotyped by a healthcare provider, members of your community, or genetic counselor?
- What theological and ethical insights have emerged for you upon reflecting on how racial/ethnic and socio-economic inequalities affect communities of color and women with respect to their perspective on and experience of genetics?
- In what ways does Galatians 3:27-28 impact your understanding of human beings? Read Jeremiah 8:17-22 and discuss the implications of that text for your understanding of social location. Who are the people that are underserved in your community? What ethical/theological principles emerge for you relative to genetics and social location? In what ways does Luther's explanation to the First Article of the Apostles' Creed apply to the situations identified in this session?
- Action question: In what ways can you and your congregation express love of underserved people in your community?

Closing prayers

INVITATION TO INTERCESSORY PRAYER

Pray for sociologists and community organizers, the marginalized of society and those who advocate on their behalf.

PRAYING WITH THE TRADITION

We thank thee, O God, for the spiritual nature of [human beings]. We are in nature, but we live above nature. Help us never to let anybody or any condition pull us so low as to cause us to hate. Give us strength to love our enemies and to do good to those who spitefully use us and persecute us.... Keep us, we pray, in perfect peace. Help us to walk together, pray together, sing together, and live together, until that day when all God's children, black, white, red, yellow, will rejoice in one common band of humanity in the kingdom of our Lord and God. Amen.

(Prayer of Martin Luther King Jr., who lived from 1929 to 1968)

Additional resources

Web sites and videos on US and Global Health and Healthcare:

“*Lifeline*” A *60 Minutes* segment on the U.S. uninsured; and “Remote Areal Medical (RAN), a non-profit charity organization which operates temporary medical clinics across the United States and throughout the world (aired July 14, 2008); online: www.cbsnews.com/video/watch/?id=4256735n%3fsource=search_video

“Sick Around the World” - A PBS *Frontline* Special that aired April 2008. It compares U.S. healthcare costs, quality, and access to that in England, Germany, Japan, Taiwan, and Switzerland and suggests what the U.S. might learn from these models. You may watch the program online: <http://www.pbs.org/wgbh/pages/frontline/sickaroundtheworld/>

The Commonwealth Fund: www.commonwealthfund.org See for example:

Racial and Ethnic Disparities in U.S. Health Care: A Chartbook (2008)
www.commonwealthfund.org/publications/publications_show.htm?doc_id=672908

“Why Not the Best? Results from the National Scorecard on U.S. Health System Performance, 2008” (2008) www.commonwealthfund.org/publications/publications_show.htm?doc_id=692682

Physicians for a National Healthcare Program: www.pnhp.org/

Global Health & Healthcare & Social Justice:

“Dr. Farmer’s Remedy,” A *60 Minutes* segment on the life and work Paul Farmer which aired May 4, 2008); online: www.cbsnews.com/video/watch/?id=4069409n%3fsource=search_video

A Frontline Program on Global Health & Healthcare:
www.pbs.org/wgbh/pages/frontline/sickaroundtheworld/

A PBS Series -- *RX for Survival: A Global Health Challenge*:
www.pbs.org/wgbh/rxforsurvival/

Global Health Facts & News: www.globalhealthfacts.org/

Partners in Health: www.pih.org Also see: *Farmer’s Pathologies of Power & Mountains*

Beyond Mountains by Tracy Kidder

Doctors without Borders: www.doctorswithoutborders.org/

Endnotes

1 This story is an adaptation of “It’s a Matter of Priorities,” a case study prepared by the National Rural Bioethics Project, The University of Montana – Missoula.

2 According to the U.S. Census Bureau, the U.S. population equals 303 million inhabitants. Of this total number, non-Hispanic whites comprise 67% of the overall population. However, only 10.8% of non-Hispanic whites are uninsured and only 8.2% are impoverished. For their part, African Americans constitute 12% of the general population and Latino/Latina Americans make up 14.5%; yet both communities suffer disproportionately from the twin hardships of being uninsured and/or living in poverty. 24% of African Americans are poor and 34% of Latinos/Latinas are uninsured. Finally, consider the make up of our national elected leadership. In the 110th U.S. House of Representatives (435 members total), 74 members identify as women; 42 as African American; 24 as Hispanic American; 1 as Native American; and 6 as Asian American. And in the U.S. Senate: (100 members total): 16 are women (35 women have served in the Senate’s history); 1 is African American (5 have served in the Senate’s history); 2 are Asian American (5 in the Senate’s history); 3 as Hispanic American (6 in the Senate’s history); and 0 are Native American (a total of 3 in the Senate’s history). See www.house.gov/daily/hpg.htm and www.senate.gov/pagelayout/reference/three_column_table/Senators.htm.

3 Joanna Mountain and Neil Risch, “Assessing genetic contributions to phenotypic differences among ‘racial’ and ‘ethnic’ groups,” and S.O.Y. Keita, R.A. Kittles, et al. al., “Conceptualizing human variation,” *Nature Genetics* November 2004, Vol. 36, No. 11, s54 and s17 respectively.

4 See the engaging research led by Henry Louis Gates Jr., featured on PBS, that traces the genetic ancestry of African Americans. Available at: www.pbs.org/wnet/aalives/profiles/index.html.

5 Paul Achter, Roxanne Parrott, and Kami Selk, “African Americans’ Opinions about Human-Genetics Research,” *Politics and the Life Sciences* June 21, 2005: Vol. 23, No. 1.

6 See James H. Jones, *Bad Blood: The Tuskegee Syphilis Experiment*. New York: The Free Press,

1993); Emilie Townes, *Breaking the Fine Rain of Death*.

7 "Statement on Signing the National Sickle Cell Anemia Control Act," John T. Woolley and Gerhard Peters, *The American Presidency Project* [online]. Santa Barbara, CA: University of California (hosted), Gerhard Peters (database). Available from World Wide Web: www.presidency.ucsb.edu/ws/?pid=3413.

8 James E. Bowman, "Genetic Screening: Toward a New Eugenics?" in *"It Just Ain't Fair: The Ethics of Health Care for African Americans*. Edited by Annette Dula and Sara Goering (Westport, Connecticut: Praeger, 1994, 165-178) and Troy Duster, *Backdoor to Eugenics*. With a Forward by Pierre Bourdieu. Second Edition. New York: Routledge, 2003.

9 This story is a redaction of the *60 Minutes II: Holy Grail* presentation on June 5, 2002. Available at www.cbsnews.com/stories/2001/11/28/60II/printable319351.shtml. Accessed September 22, 2008.

10 Sara Hoerlein, "Female Sterilization in Puerto Rico." Available at www.clem.mscd.edu/~princer/ant440b/paper_04.htm. Accessed June 29, 2008.

11 Johanna Schoen, "Between Choice and Coercion: Women and the Politics of Sterilization in North Carolina, 1929-1975," *Journal of Women's History*, Vol. 13 No. 1 (Spring, 2001), 132-156.

12 Dorothy Roberts, *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty* New York: Vintage Books, 1997, 90-91.

13 See the CNN interview, "Tubal ligations for the poor" online at: www.cnn.com/video/#/video/politics/2008/09/25/tubal.ligations.for.poor.cnn

14 For documentation of these claims, see the statistics available at: www.globalhealthfacts.org/ and also from the World Health Organization (www.who.int/en/) and from the United Nations (<http://hdr.undp.org/en/reports/global/hdr2007-2008/>). Finally, for fuller analysis of these realities, see Lisa S. Cahill, *Theological Bioethics: Participation, Justice, & Change* (2005)

