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Fellowship

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This issue of *MennoHealth Journal* presents a first round of follow-up materials from a busy summer of conferences in the MennoHealth world.

History will likely record the **MennoHealth Church USA Convention**, June 30-July 5 in Kansas City, Missouri, as a key event in the struggles of the church around issues of sexuality. Since these are issues of emotional, physical, and spiritual health, it is fitting that *MennoHealth Journal* address them in some way, controversial though they be. In his editorial, MHF Executive Director, Paul Leichty, lays out the background and rationale for presenting two articles to open the conversation. These articles are based on a workshop presented at the Convention in Kansas City.



Later in July, MennoHealthcare Fellowship (MHF) held its own conference, the **Annual Gathering 2015**, July 19-21, 2015, at the Sheraton Harrisburg Hershey Hotel in Harrisburg, Pennsylvania. A report of that event is included in these pages.

In addition, **Lyubov Slashcheva** contributes another in her series of articles on Climate Change and Public Health with reflections on the discussions held at the Annual Gathering as well as several events surrounding the big **MennoHealth World Conference (MWC) Assembly** which immediately followed the

Annual Gathering. Lyubov, who has just been elected as a new member of the MHF Board, invites us all to remain active in caring for God's creation in these precarious times.

MHF President, Eric Lehman, also reflects on the summer activities including two additional events linked to MennoHealth World Conference in which MennoHealthites are being encouraged to build global networks of support to promote a holistic view of health around the world.

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Controversy and Discernment

Editorial by Paul D. Leichty, M.Div.
Executive Director of Mennonite Healthcare Fellowship

Mennonite Healthcare Fellowship (MHF) exists to explore the interface between Christian faith, human health, and the many healthcare professions in which MHF members are engaged. As we do this exploratory work, there are three major factors that affect how we think about health.

- **Personal experience.** As beings made in the image of God, human beings who are physical, psychological, emotional, and spiritual, we come with our own **personal experiences** of health as we live in the world around us.
- **Professional experience.** As healthcare professionals, educated, mentored, and certified to provide care for the health needs of others, we are particularly attuned to the **science of health** and how it applies to those we see in the practice of our professions as well as society as a whole.
- **Corporate faith experience.** As members of the body of Christ, the church, we relate to other Christians proclaiming the **vision of health** as we attempt to discern the way of Christ and what it means to move toward wholeness and health as disciples of Jesus in both our individual lives and as a church.

As we do this discernment together, it is inevitable that our experience of being human, our understandings gained through education and interacting with others, and our vision of what it means to be a disciple of Jesus will reveal differences in our perspectives. These differences can easily bring controversy into the discernment process. This is illustrated most notably in today's discussions in the North American church around issues of sexual identity and orientation, or, in popular speech, the "homosexuality issue."



Until now, Mennonite Healthcare Fellowship has steered clear of this issue, primarily because it *is* controversial and **MHF members have many different and sometimes conflicting views**. However, the issue has come to a head for Mennonite Church USA, the largest Mennonite group in North America. This was particularly demonstrated in the July Convention in Kansas City in which delegates struggled mightily with the controversy about the relationship of persons in same-sex covenanted relationships to the larger church.

While the church is made up of humans who call themselves Christian and want to follow Christ, not all of us in the church are as well educated about the many aspects of human health as are healthcare professionals who have spent much of their lives studying these matters. Thus, as the church is looking for collective wisdom, it is increasingly calling on healthcare professionals to lend their voice to the discussion so that **the science of health** may augment **the personal experience of health** and **inform the theology of health**.

It is in that spirit that *Mennonite Health Journal* begins this discussion with articles by Carol Lehman and D. J. McFadden based on a workshop that they jointly led at the Mennonite Church

USA Convention in Kansas City. These articles are not intended to be any kind of official position of *Mennonite Health Journal* or Mennonite Healthcare Fellowship or any of its publication partners. Both authors provide ample documentation of their sources and reasonable evidence for their conclusions, but there may be other sources and opinions as well.

MHJ welcomes letters to the editor and other short responses to these articles as we do for any article. We will use our discretion as to whether and in what form we publish such responses. What we would most welcome are additional articles from the perspective of healthcare providers that would give additional insights that are equally thoughtful and well-sourced. We will seriously consider such articles for future issues of *Mennonite Health Journal*.

MHJ is a forum for discussion among healthcare professionals who share an Anabaptist Christian perspective on the health issues of our time and particularly the issues faced by healthcare professionals themselves. Such a discussion serves a two-fold purpose. It encourages each of us to **a greater integrity** in our personal lives, our professional responsibilities, and our life of faith in Jesus Christ, and it serves as an **additional resource to the larger church** from the perspective of those who think about and work in the area of human health.

May God grant us grace to listen carefully, share humbly, and discern wisely as the Spirit leads!



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A Psychologist's Perspective on Same-Sex Orientation by Carol Lehman, Ph.D.

Introduction. Much of the conversation in Mennonite Church USA about the inclusion (or not) of LGBTQ Christians in the church has proceeded without the benefit of the understandings from science of the complex causes associated with same-sex orientation.

Beginning with the Women's Movement over 50 years ago, Mennonites in North America have participated in a great shift in gender roles. Today, psychologists, psychiatrists, and, by and large, the rest of us have come to accept that gender roles—what men and women are supposed to look like, how they are to behave, and what their interests should be—are culturally and socially constructed more than determined by their biology. (Actually anthropologists studying peoples in the non-western world were aware of this much earlier and also wrote about cultures where there were three genders.) After reappraising its views on the flexibility of gender roles, the church's next big challenge seems to be same-sex orientation.

Sexual orientation as a continuum.

Sexual orientation refers to an enduring pattern of erotic, romantic, and/or emotional attraction to men, to women, or to both sexes. Note that this definition uses the word *attraction* and not the word *behavior*. The prevalence of homosexuality differs considerably if one counts as homosexual individuals those who experience same-sex attraction or counts as homosexual only those who have engaged in same-sex genital contact or counts as homosexual only those who consider themselves to be such. It also depends on whether both men's and women's data are combined.¹

A 2011 Williams Institute study of the UCLA School of Law reported a 3.5% rate, while The University of Chicago's National Opinion Research Center has found a 2% prevalence rate. Interestingly a 2011 Gallup poll showed that, on average, American adults believe that 25% of the population is homosexual. The reasons for that discrepancy between actual and perceived incidence is something to ponder.²

As Mennonite physician Willard Krabill pointed out, the degree to which we experience attraction to the opposite gender or to the same gender varies from person to person and from time to time in our lives. Psychologist Alfred Kinsey developed a continuum on a scale of 0 to 6, with 0 indicating exclusively heterosexual attraction and 6 referring to exclusively homosexual attraction. Krabill observed that few people are exclusively heterosexual in terms of having no feelings of attraction for their own gender. He concluded that most of us would find ourselves on Kinsey's scale between one and five, with the majority being a one or two.³

It is not unusual for teenagers to have some sexual experiences with their own gender. An example would be girls who practice kissing with their girlfriends with the rationale that this will help them learn to be good kissers with their eventual boyfriends. There seems to be an erotic aspect to some of the roughhousing which goes on in shower rooms and in other settings among adolescent boys. Note that my examples are of behavior. Same-sex crushes, that is, internal feelings of affection and attraction, would also be common.

So what is the significance if individuals are not exclusively straight or gay throughout their lives in either their feelings of attraction, their behaviors, or both? To the extent that heterosexuals are comfortable and accepting of past same-sex attractions and/or experiences, it would seem that they would bring an empathy to this discussion. For individuals who came away from such experiences with feelings of shame, perhaps even of self-hatred or loathing, it

could happen that they might direct—really project—that same hatred or prejudice toward same-sex oriented persons. This is one understanding of homophobia.

The shift from “perversion” to sexual “variant”

If I had to summarize in one sentence the changes that have occurred in the mental health field in the past 40 plus years regarding our understanding of same sex-orientation, it would be the shift from explaining **homosexuality as a personality defect** around unresolved neurotic conflicts, in other words, a developmental arrest, to an understanding that it is **not a disorder at all** to be cured through psychological interventions.

The developmental arrest hypothesis originated from psychoanalytic theories of psychosexual development. Interestingly, although Sigmund Freud did see homosexuality as a type of developmental arrest, he did not consider it an illness, a source of shame, or something that necessarily could or should be treated, as he wrote in a famous letter in 1935 to a mother who had written him about her same-sex oriented son.⁴ Unfortunately, many other psychiatrists and psychologists did not exhibit this same tolerance and used words like “deviant” or “perversion” to describe same-sex sexuality.

Psychiatrists and psychologists changed their views about the origins of same-sex orientation because of understandings gained in their clinical care of same-sexed patients and as a result of research. In my own practice I have observed how diverse the childhood experiences of same-sexed patients were. I agree with the observation of Willard Krabill (and others) that “instead of saying *homosexuality*, we should perhaps say *homosexualities*” (p.107).

Psychiatrist Richard Isay explained the frequent pattern of estranged relationships between fathers and gay sons as the *result*, not the *cause*, of the son’s same-sex attraction.⁵ None of my patients verbalized a conviction that they had chosen their orientation. Their journeys were ones of discovering who they authentically were--a path toward self-acceptance.

Many have observed that the same child-parenting patterns thought to lead to a same-sex orientation could occur and the individual would still develop as a heterosexual. Some have hypothesized that trauma by way of sexual molestation or seduction could be the cause. Again I must point out that there are many heterosexuals who have experienced childhood sexual trauma without becoming gay. Rachel Halder wrote a blog earlier this year in which she very movingly described her upset when someone, once he learned of her experience of childhood sexual abuse, assumed that probably explained her same-sex orientation.⁶

Research also played a role in changing clinicians’ opinions. Previous studies which had concluded that all homosexuals suffered from mental health problems were drawn from patient populations. Subsequent studies matched reasonably well-adjusted homosexuals who were not in treatment on relevant criteria with heterosexuals. No inherent connection between homosexual orientation and clinical symptoms of mental illness was found.⁷

This is not to say that same-sex oriented persons do not have problems. As a psychotherapist who has sat with various patients as they have come to terms with their orientation, it is clear to me that the stigmatization they expected to receive from family and society could cause at the very least the self-doubt and low self-esteem that other minorities experience.

So if same-sex orientation is not a mental disorder, what is it? Psychologists see same-sex orientation as a “variant” of normal sexual expression—part of the spectrum of human sexuality. Perhaps in the future we will be better able to explain the complex roles that both nature and nurture may play.

What is the relationship between sexual orientation, gender identity, and transgender?

While sexual orientation relates to one's feelings of erotic attraction to men, to women, or to both, gender identity relates to a person's internal feelings of being male or female. While a child of two typically can tell you if he or she is a boy or a girl and can usually categorize others correctly, gender identity relates to something more internal and speaks to a person's sense that he or she is the sex assigned at birth.

There was a time when it was believed that a boy could be raised from early on as a girl and would achieve a feminine gender identity. In other words, nurture could trump nature. What was not adequately understood at that time was the role of prenatal hormones on the brain and that, although gender roles may be culturally and socially constructed, gender identity is rooted in biology.

In spite of the stereotypes of the lesbian who looks masculine or the effeminate, perhaps flamboyant, gay man, the vast majority of lesbians identify as women, and, similarly, a majority of gay men identify as men. This speaks to different biological pathways for sexual orientation as compared to gender identity. It is estimated that .03 % of the population is transgender, and this is likely an underestimate given methodological problems of measurement.⁸ Transgender is when an individual's gender identity does not match his/her gender assigned sex at birth.⁹

Space limits me from exploring the scientific understanding of transgender, a topic very much in the news these days. Current research points to brain development.¹⁰ Discrimination of and violence toward transgender persons are very real. An attempted suicide rate of as high as 47% has been reported. Encouragingly, this danger is minimized when the transgender person is in a supportive environment.

Respect for the person and his/her personal authenticity is an important value in the psychology code of ethics. Both gays and straights in the Western world have more opportunity now to realize a gender expression that fits their interests and talents and is not limited by the binary nature and expectations of the traditional masculine and feminine roles. Psychology's value for the dignity of all persons could be a voice to both society and the church, calling for the removal of the stigma associated with same-sex orientation.

¹ Savin-Williams, Ritch. (2006). Who's gay? Does it matter? *Current Directions in Psychological Science*. 15: 40-44.

² Jalsevac, John. (2011). Poll: Americans massively overestimate prevalence of homosexuality. Retrieved from <https://www.lifesitenews.com/news/poll-americans-massively-overestimate-prevalence-of-homosexuality>

³ Krabill, Willard S. (1999). The gift and same-sex orientation. In Anne Krabill Hersheberger, (Ed.), *Sexuality: God's Gift* (pp. 99-117). Scottsdale, Pennsylvania: Herald Press.

⁴ Gay, Peter. (1988). *Freud: A Life for Our Time*. New York: Norton.

⁵ Roughton, Ralph. E. (1997). Becoming Gay: The Journey to Self-Acceptance. *J. Amer. Psychoanal. Assn.*, 45:293-298.

⁶ Halder, Rachel. (2015). *Unpacking the lies: What being queer has to do with sexual abuse*. Retrieved from www.ourstoriesuntold.com/unpacking-the-lies-what-being-queer-has-to-do-with-sexual-abuse/ .

⁷ American Psychological Association. (2008). *Answers to your questions: For a better understanding of sexual orientation and homosexuality*. Retrieved from www.apa/topics/orientation.pdf.

⁸ Gates, Gary J. (2011). *How Many People are Lesbian, Gay, Bisexual, and Transgender?* Los Angeles: Williams Institute. Retrieved from <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Gates-How-Many-People-LGBT-Apr-2011.pdf> .

⁹ American Psychological Association. (2011). *Answers to your questions about transgender people, gender identity, and gender expression*. Retrieved from <http://www.apa.org/topics/lgbt/transgender.aspx>

¹⁰ PBS Newshour. (5/13/2015). Is gender identity biologically hard-wired? Retrieved from <http://www.pbs.org/newshour/bb/biology-gender-identity-children/#.VWplbRRqN2M.email>; Rose, Charlie. (June 16, 2015). The Brain Series: Gender Identity. Retrieved from <http://www.charlierose.com/watch/60578677> .

Additional Resource

Freed, J. Lamar, Keener, Carl S., and Swartzendruber, Douglas E. (2001). Biological and psychological views. In Ruth Conrad Liechty (Ed.), *Welcome to Dialogue Series*. Retrieved from <http://www.welcome-committee.info/booklet-5-intro.html>.



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Biology of Same Sex Attraction by D. J. McFadden, MD MPH

In the book, *As Nature Made Him: The Boy that was Raised as a Girl*, the story of Bruce Reimer is poignantly told. The story recounts the true life story of an attempt to assign a female gender to a male child who is one of two identical twins. Bruce was mutilated by a misstep during circumcision, and the decision was made to surgically and hormonally make him into a girl, in hopes of giving him a normal life. The case was presented at scientific conferences as a success and sexologists used this case to say that gender identity at birth is a *tabula rasa*, a blank slate that we through society imprint or write upon.

The only problem is that scientists did not follow Bruce (now named Brenda) long enough. Bruce/Brenda hated his breasts and refused his hormone treatments. He felt that something was wrong and at the age of 14 demanded to know what was going on. He wanted to know the truth about the conflict within himself in regards to his attractions and feelings. He was eventually told. And so, at the age of 15, he insisted on being called David. He had a double mastectomy, began testosterone therapy, and had a phalloplasty to reconstruct his penis. He admitted that he had always been attracted to women and married, adopted children, and engaged in typical male gender type sex with the help of prosthetics. He also demonstrated an important principle that science had been working on since the early 1900's-- that the brain is more than a holder of experiences. It is not just a slate that is written upon. There are basic, fundamental parts of the brain that are established early on in utero.

The early development of the human brain

From the fields of embryology and neurobiology, we understand that the brain is influenced by hormonal messages and neurotransmitters early in its development. The local environment of the brain is crucial to how it will develop. We recall from embryology that differentiation of cells in the earliest stages of development is based in part on where the cells are located and who their neighbors are. These cells (all identical) begin early on to organize. There is a polarity that forms and is identifiable as early as 4-8 cells into our being. The brain develops not just in a programmed way as non-scientists might expect. The brain doesn't just get the messages from the genetic material and then become the cerebellum, for example. The brain is programmed genetically to respond to various local messages to become what it will become. Connections, exposures, and experiences all shape the brain. Some of the most important and basic features of who we become happen within the womb.

There are several regions of the brain that have been identified as responsible for sexuality. Beginning with work from 1849, scientists have identified that one of the compounds playing a major role in the differentiation of male from female is testosterone. We now understand that the male phenotype results from the effects of testosterone or testosterone derivatives. The brain has a multitude of receptors for sex hormones. Our sex hormones are critical for influencing sexuality and the behavior of adolescents and adults, but they also appear to be critical for creating what we typically consider to be male and female brains. The brains of males and females are different, and some of these differences begin in the uterus in response to sex hormones.

In the preoptic region of the limbic system, groups of nerves with receptors to sex hormones have been found. The location of these nerves is consistent across many species, from birds to mammals. Through the surgical removal of these regions or through castration and

implantation of hormones in these regions, important regions related to sexuality have been identified. The medial part of the preoptic area is the site of sex steroid activity that is necessary and sufficient to activate male sexual behavior and the ventral medial nucleus of the hypothalamus is the site of sex steroid activity identified as connected to female sexual behavior.

The hypothalami of men and women are different. Specifically, a difference in the third interstitial nucleus of the anterior hypothalamus (INAH-3) has been found. This region has a greater volume in men than in women. A difference between the volume of this region in heterosexual and homosexual men has also been identified (LeVay 1991)

The work of LeVay in the 1990s was ground breaking. He demonstrated that one area of the brain of homosexual men was different from the brains of heterosexual men. This region in the brain of a homosexual man had a smaller volume, which is more typical of women. So he was able to demonstrate a structural difference. His work was originally criticized because it was done in men that had died of AIDS and so there was concern that the area could have been influenced by AIDS. Of note, one of the bigger skeptics, Byne, went on to reproduce this work, and, in fact, showed that HIV/AIDS did not play a role in the change. (Byne et al 2001)

So the first piece of the story is that we have regions of the brain that have been shown to be influenced by the sex hormones in utero. These regions have been shown to be important in the sexual behavior that we consider to be heterosexual male and heterosexual female. Furthermore, it has been demonstrated that there is a difference in the preoptic area of males and females, and that the preoptic region of homosexual males, specifically the INAH3, is different from heterosexual men.

The effect of testosterone

So what might happen if a female child is exposed to testosterone in utero? Congenital adrenal hyperplasia (CAH) does help us consider this question. Early in development, fetuses with CAH are exposed to higher than usual concentrations of adrenal steroids including testosterone. Fetuses that are XX are born with physical characteristics which are variable, but can include a scrotum and a penis. Phenotypically, they can range from typical female to nearly typical male. As we understand more about developmental neuroendocrinology, we realize that the term phenotype may be lacking as we describe the brain. One study of adult women found that 37% of women with CAH identified as homosexual or bisexual. (Money et al 1984) More than 20% of the women did not answer the question regarding sexuality.

From the embryologic influences of hormones, the brains of men and women have different intrauterine experiences. These are due in large part to endogenous influences. However, exogenous influences should also be considered. Can environmental factors in the womb impact development of the fetus?

The effect of stress on the fetus

Some of the earliest observations included the impact of stress on a fetus. Cortisol can inhibit testosterone production. There has developed a maternal stress theory of male homosexuality; it has been theorized that high levels of maternal cortisol inhibit the testosterone of their developing offspring. This theory is based on animal models that demonstrated that maternal stress at critical periods results in males that exhibit female sexual behaviors. (Ward and Weisz 1984) In laboratory animals it is possible to create levels of stress and make observations that we can't easily make in humans. The animal model points to the release of maternal stress hormones and the inhibitory effect of these steroids on the surge of testosterone on male rats

through the intrauterine exposure to the steroids. Several retrospective studies have been done to examine this theory in humans. The results have not been conclusive (de Rooij et al. 2009). However, one study from WWII Germany did demonstrate a link between severe stress (or perhaps “toxic stress” to use language of today) and having a homosexual son. (Dorner et al 1980) While only 10% of mothers of heterosexual men remembered stressful events during pregnancy, 2/3 of mothers of homosexual males could recount such a stress. We are left with the suggestion that perhaps external factors could impact the development of the fetal brain in regards to sexual preference.

The effect of intrauterine testosterone

Another interesting line of thought concerns the effect of intrauterine testosterone on a developing female child. In animal models, females that develop adjacent to multiple male siblings are more likely to be masculinized and have male sexual behavior and preferences more like males. (Pei et al 2006) However, this has not been shown in humans. Perhaps the intrauterine testosterone from one male is not enough and multiple gestations beyond twins is uncommon in humans.

The effect of birth order

I would include in the exogenous intrauterine exposure category the ideas brought forth in the older brother theory or the birth order studies. A strong link between birth order and male homosexuality has been found. In 1996 evidence was found that gay men have a greater number of older brothers than heterosexual men. (Blanchard and Bogaert 1996) This finding exists even if the older brothers are not raised in the same household as their younger homosexual sibling. And there was no increase if the older brothers were adopted or not biologic. (Bogaert 2006) The birth order effect on male homosexuality is perhaps the most reliable finding in decades of research on sexual orientation. The finding has led to the maternal immune hypothesis which has been based upon the medical model of Rh factor and hemolytic disease of the newborn. In the maternal immune hypothesis, it is proposed that mothers, since they do not have a Y chromosome will not have the proteins created by the Y chromosome. As a result, these proteins will be foreign and antibodies will develop to them. With subsequent pregnancies these antibodies will enter the fetus and cross the blood/brain barrier and inhibit the development of a male with typical male sexual behavior.

Genetics and sexual attraction

While neurobiology and neuroendocrinology have added much to our understanding of sexuality and same sex attraction, genetics has also provided valuable insight. Dean Hammer made an observation that some families seemed to have an increased number of gay males in the maternal line. This suggested that the X chromosome may play a role. Using these observations, Hammer applied molecular genetic techniques to identify where the similarities lay. He found that pairs of openly gay brothers shared a tiny region on the end of the X chromosome and proposed this gene may predispose a male to homosexuality. (Hammer et al 1993) Recently a much larger study of gay brothers confirmed the findings of Hammer after 20 years. (Sanders et al 2014) The larger study also identified another region on chromosome 8 that may also be involved.

Since the purpose of sexuality is to perpetuate the species, it is wise to briefly address some of the proposed theories on why homosexuality may persist across all cultures and countries.

The question is one of evolutionary fitness. How can the genetics be perpetuated? E.O. Wilson, a sociobiologist, has gone as far as to say that society has needed non-breeders to advance society. Individuals, unhampered by parental roles could take on roles such as shamans, seers, artists, matchmakers, advisors, diplomats. He argued that clans or families with such individuals were more able to survive and thrive, and thus through their clan members, a homosexual's genes were surviving and being transmitted. This would be a variation on the kin selection hypothesis which is seen in very communal social organizations like wolves and bees.

Another thought is that these genes are similar to the genes that cause conditions like sickle cell anemia. Perhaps such might be beneficial in certain situations, so they are passed on since they provide some level of health under other natural pressures. Perhaps they are sexually antagonistic genes that provide increased ability to have children in one gender, and no children in another. In one study, it was found that female relatives of gay men have more children than relatives of straight children. There could be many reasons for this, but perhaps one of them is a drive to be with males that is so strong that they have earlier families and more children.

Epigenetics

Recently, there has been a host of discussions about the field of epigenetics. While historically we spoke of our phenotype being determined by our genotype, we have begun to understand that many factors influence the expression of genes. Epi marks are extra chemical groups that regulate how tightly the DNA is bound. If DNA is unable to unwind and be translated, protein cannot be produced from the DNA. Epi marks are impacted by life experiences. The study of stress, violence, and meditation on our genetic expression of disease has been ground breaking. These epi marks, usually accumulated throughout life, are also able to be transmitted to children. Epi marks have been proposed as a potential explanation of how genotype might not be sufficient for the expression of homosexuality. (Rice et al 2012) While a recent area of study, epi marks may help to unravel some of the inconsistent findings from twin and other genetic studies.

Summary

The data so far do not lead to one cause of all homosexuality. There does appear to be a distinct difference in male and female sexuality, so it makes sense that there would be distinct differences in male and female homosexuality. There appear to be numerous steps along the way where heterogeneity can occur. Some of those differences are genetic, some of those differences are from intrauterine hormonal factors, and some are from external factors.

It is interesting that the work of Levay, who demonstrated a difference in the INAH3 of male heterosexuals and male homosexuals, centers on the preoptic region of the brain. This is an area of the brain that is noted to be responsible for attraction to males. I also find it interesting that women who have the Xq24 change that Hammer noted in the familial link of homosexuality have more children. (Camperio-Ciani et al 2004) Is it possible that this gene somehow translates for male attraction?

As we look at the biology of homosexuality, I believe we may be actually looking at the biology of sexual attraction. Thus, it may be that some humans (male and female) are going to be created to be attracted to males--their erotic love will be centered on males, and some humans will be created to be attracted to females--their erotic love will be centered on females. As we focus our attention on the love and attraction to which the biological evidence is leading us, I think it begins to change the discussion.

What does it mean for us as Christians if we realize that persons with a homosexual attraction have been created by God and are a part of the spectrum of sexual attraction? The scientific community has provided tools for the church. As the church continues to discern, it seems prudent to use all of the tools available to inform the process.

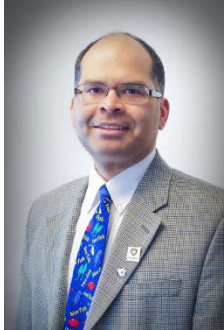
Sources

- Blanchard R and Bogaert, AF (1996). Biodemographic comparisons of homosexual and heterosexual men in Kinsey Interview Data. *Arch Sex Behav.* 25, 551-579.
- Blanchard R and Bogaert, AF (1996). Homosexuality in men and number of older brothers. *Am J Psychiatry.* 153, 27-31.
- Bogaert, AF (2006). Biologic versus nonbiological older brothers and men's sexual orientation. *Proc Natl Acad Sci USA.* 103, 10771-10774.
- Byne, W. et al. (2001). The interstitial nuclei of the human anterior hypothalamus: an investigation of variation with sex, sexual orientation, and HIV status. *Horm Behav.* 40, 86-92.
- Camperio-Ciani A et al. (2004). Evidence for maternally inherited factors favouring male homosexuality and promoting female fecundity. *Proc Biol Sci.* 271,2217-2221.
- de Rooij, SR et al. (2009) Sexual orientation and gender identity after prenatal exposure to the Dutch famine. *Arch Sex Behav.* 38, 411-416.
- Dorner, G et al. (1980) Prenatal stress as possible aetiogenetic factor of homosexuality in human males. *Endokrinologie.*75, 365-368.
- Hamer, DH et al (1993). A linkage between DNA markers on the X chromosome and male sexual orientation. *Science.* 261, 321-327.
- LeVay, S. (1991). A difference in hypothalamic structure between heterosexual and homosexual men. *Science.* 253, 1034-1037.
- Money, J. et al. (1984) Adult erotosexual status and fetal hormonal masculinization and demasculinization: 46, XX congenital virilizing adrenal hyperplasia and 46, XY androgen insensitivity syndrome compared. *Psychoneuroendocrinology.*9, 405-414.
- Pei, M et al. (2006) Intrauterine proximity to male fetuses affects the morphology of the sexually dimorphic nucleus of the preoptic area in the adult rat brain. *Eur J Neurosci.* 23, 1234-1240.
- Rice, WR et al. (2012) Homosexuality as a consequence of epigenetically canalized sexual development. *The Quarterly Review of Biology.* 87, 343-368.
- Sanders, AR et al. (2015) Genome-wide scan demonstrates significant linkage for male sexual orientation. *Psychological Medicine.* 45, 1379-1388.
- Ward, IL and Weisz, J. (1984). Differential effects of maternal stress on circulating levels of corticosterone, progesterone, and testosterone in male and female rat fetuses and their mothers. *Endocrinology.*114, 1635-1644.

Books

Balthazart, J. (2012) *The Biology of Homosexuality*. Oxford University Press, New York.

LeVay, S. (2010) *Gay, Straight, and the Reason Why: The Science of Sexual Orientation*. Oxford University Press, New York.



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Walking Together for Healthy Communities

A Report on Annual Gathering 2015

by Paul D. Leichty



Mennonite Healthcare Fellowship's fourth Annual Gathering will be remembered as unusual, perhaps even historic. Instead of the typical weekend in June in a retreat setting, **Annual Gathering 2015** was held on Sunday-Tuesday, July 19-21, 2015, immediately prior to Mennonite World Conference Assembly at the Sheraton Harrisburg Hershey Hotel in Harrisburg, Pennsylvania. Just as the Mennonite World Conference held its most diverse Assembly ever, the Annual Gathering also reflected that international flavor.

The Annual Gathering's theme of "**Walking Together for Healthy Communities**" was amply illustrated by stories of the Spirit at work in many times and places. Stories came from the time of Jesus' earthly ministry to contemporary stories from Harrisburg and Philadelphia to India, Tanzania, Kenya, Congo, and Ethiopia. More than 160 persons participated in some or all of the event sharing their own personal stories with each other in plenary sessions, workshops, roundtable discussions, and, of course, over mealtimes and breaks.

The ballrooms and conference rooms of the Sheraton Harrisburg Hershey Hotel provided a setting not only for healthcare professionals and their spouses but also for over 20 children of those who came as entire family units. Children also had the opportunity to share their own stories and play together on Monday at the nearby Slate Hill Mennonite Church.



Worship leader **Jane Hooper Peiffer** and music leader **Nan Garber** led in worship at the beginning of each of four plenary sessions. Their choice of music, readings, and reflections helped Annual Gathering participants reflect on the topics of the presentations which followed.

Sunday evening's opening presentation featured a different form of story-telling than



the usual Annual Gathering plenary session. In the dramatic presentation **“The Jesus Stories...what's for lunch?”** Ted & Company reminded those gathered that healthy communities not only *walk* together; they also *eat* together! The comedy duo of Ted Swartz and Jeff Raught wove together action and song in recreating some of the stories and parables of Jesus involving food and table gatherings. They offered a fresh look at these Gospel stories that was both humorous and insightful and challenged the audience to think about who gets to be a part of our communities seeking greater health and wholeness.



Dr. Ann Thyle, a palliative care physician from Delhi, India, shared a more personal story in her Monday morning presentation, **“Health Care Delivery to the Poor: A Personal Calling.”** Leaving behind a career in academic medicine, Dr. Thyle accepted a calling to serve in first one, then many, small mission hospitals in northern India. Drawing her audience along on her journey through pictures and moving storytelling, she described her career shifts from anesthesiology to obstetrics to her more recent work in pioneering palliative care medicine in northern India.

Monday evening’s presentation by community activist **Shane Claiborne** brought the pictures and stories of “Walking Together for Healthy Communities” back to the state of Pennsylvania as he shared about the work of his Christian community in the Kensington neighborhood of Philadelphia. He reminded his hearers that Jesus calls his followers to **“Another Way of Doing Life”** in addressing



the issues of injustice, violence, and poverty that are critical to the healing process for folks living in many urban neighborhoods. Particularly powerful were his stories of gun buy-back programs and the surviving relatives of gunshot victims pounding the guns into gardening tools for use in growing vegetables in the community garden.



As compelling as these plenary presentations were, it was often in the follow-up **workshops** where Annual Gathering attendees experienced

the issues at a more personal level. Ted Swartz and Jeff Raught led one group in a further exploration of the story of Jesus raising Lazarus from the dead in their workshop called “Chasing Goosebumps.” Ann Thyle elaborated on some of themes of her plenary presentation in her workshop setting.

Meanwhile, Fred Kauffman and Curtis Book, Mennonite Central Committee (MCC) workers and residents of Philadelphia explored more deeply the issue of **“Gun Violence: A Public Health Problem.”** Powerful first-hand stories from Harrisburg Brethren in Christ pastor, Woody Dalton, added some sobering details into the presentation.



Additional workshops highlighted the international flavor of the Annual Gathering even more. **Dr. Bwire Chirangi**, chief medical officer of the Shirati KMT Hospital, affiliated with the Mennonite Church in Tanzania, reported on a research program aimed at **“Reducing Maternal Mortality in Rural Tanzania.”** The program of providing women with medications to reduce postpartum hemorrhage and sepsis has had a significant impact in preserving the health of mothers giving birth in the rural regions of his country.

Maurice Anyanga, MCC worker working in conjunction with the Mennonite Church in Kenya shared some of the fascinating stories of how the church is carrying out an educational program in **“Responding to the Challenges of HIV/AIDS.”** Working with both cultural realities and Christian principles, the church is responding to one of the biggest public health issues in today’s world.

Linda Witmer, Associate Professor of Nursing at Eastern Mennonite University’s Lancaster, Pennsylvania campus, shared from her experience in both Central America and the United States in **“Engaging Congregations in Health Ministries.”**



The topic of Climate Change and its effect on public health worldwide was discussed in several settings. Dr. Catherine Thomasson, Executive Director of Physicians for Social Responsibility, led a workshop entitled **“Climate Change: Solutions to Global Health Threats.”** Following up on her explanation of some of the global issues, Stan Godshall and Lyubov Slashcheva led in a Tuesday morning roundtable discussion of steps that can be taken on a personal and professional level to respond to God’s call for creation care amidst this monumental challenge of our time.

A final workshop, entitled **“A Little One Shall Lead Them: Reimagining Leadership on the Journey Toward Health”** was led by **David Gullman**, chaplain with persons with intellectual

and developmental disabilities at Pleasant View in the Harrisonburg, Virginia area. In challenging workshop participants to imagine following the lead to greater health from persons thought to be most broken, Dave foreshadowed his plenary presentation at the final session on Tuesday morning with the theme, **“Discovering Healthy Communities through the Broken Body.”** Weaving together stories from his growing up days in Ethiopia to becoming the parent of a daughter with Down Syndrome and then pastoring a flock of persons as part of the “Faith and Light” movement, Dave led the congregation naturally into a time of communion, remembering the broken body of Christ. Worship leader, Jane Hooper Peiffer, led in a commissioning service as each participant was draped with a simple maroon or white ribbon to go out as beloved disciples of Jesus and be the healing presence of Christ in the world.



Throughout the Annual Gathering, the lived stories of “Walking Together for Healthy Communities” became the stories proclaimed to the 160 persons gathered and thus became part of the shared story of Mennonite Healthcare Fellowship (MHF) as an interdisciplinary community of Anabaptist health professionals which seeks to nurture the integration of faith and practice, to provide opportunities for dialogue on health related issues, and to address specific needs

through education, advocacy, and service.



Established in 2011 when Mennonite Medical Association (MMA) and Mennonite Nurses Association (MNA) joined to form a new organization open to all Anabaptist healthcare professionals, MHF welcomes the participation of Anabaptist individuals involved in any healthcare discipline from students to active practitioners to retirees. In addition to the Annual Gathering, MHF sponsors Regional Meetings, the quarterly *Mennonite Health Journal*, scholarship and grants for mission-related activities, and the networking and support of like-minded colleagues. Additional information is available at www.mennohealth.org or by calling 1-888-406-3643.



Paul D. Leichty, M.Div. is Executive Director of Mennonite Healthcare Fellowship (MHF). Paul has served as a pastor, church musician, computer support person, disabilities advocate, and administrator/organizer of a number of church-related ministries. In addition to responsibilities at MHF, Paul is Executive Director of Congregational Accessibility Network and Director of User Services at Mennonite.net. He is also active in music at Berkey Avenue Mennonite Fellowship in Goshen, Indiana where he lives with his wife, Twila Charles Leichty.

Maintaining Zeal in the Diaspora by Lyubov Slashcheva



It was a great pleasure to convene in Eastern Pennsylvania with so many old and new friends! Like many of you, I attended multiple gatherings. My week of fellowship began at the **Global Youth Summit (GYS)**, held at Messiah College. Following the **Mennonite Healthcare Fellowship (MHF) Annual Gathering** at the start of the week, I ended my communal journey at the **Mennonite World Conference (MWC) Assembly**. Throughout all these meetings, I noted concern for the environment and authentic discussion on how climate change affects the lives of our church family around the world.

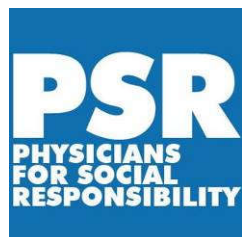
I led a workshop at the GYS entitled, “**Service en route: the gift of alternative transportation.**” Youth from various countries shared about what typical versus alternative transportation looks like from their perspective. We talked about how our use of transportation in our daily living can be mindful of the needs of our neighbors as well as our call to be good stewards of the earth’s resources.

Service en Route: the gift of alternative transportation



Lyubov Slashcheva

GYS 2015: Saturday, July 18—14:30-16:00pm



During a workshop for the MHF Annual Gathering, Catherine Thomasson, Executive Director of Physicians for Social Responsibility, challenged us as healthcare providers to own our influence as those responsible for the public’s health. She offered several avenues to extend our influence. Healthcare providers can advocate as citizens on policy change relating to climate topics. We can also inform our patients

of the health hazards of greenhouse gases and the destabilizing effects of climate change.

Stan Godshall and I led a roundtable discussion the following day which was full of affirmation for the many personal steps that we have taken to lessen our footprint on the environment and how our faith and position as healthcare providers informs these decisions.

Responding to Climate Change



Stan Godshall

Lyubov Slashcheva



Those who attended the MWC Assembly noted many attempts to be environmentally responsible. Upon arriving, each participant received a hand-made bag consisting of an MCC school kit bag with a repurposed tie as a strap; inside the bag was a metal water bottle for reusable hydration purposes throughout the week. At meal time, all cafeteria plates, dishes, napkins, and eating utensils were compostable with special waste containers provided.

Along with engaging in these communal intentional steps in stewardship and many exciting activities and workshops, I enjoyed facilitating a workshop entitled, “**The Effects of Climate Change on Human Health: where do justice, missions, and discipleship fit?**”

In this workshop, participants reflected on

Biblical, scholarly, and scientific perspectives on the connections between climate change and human health. They also shared their perspectives on the links and the steps their families and churches are taking to be intentional about creation care. Representatives from **Mennonite Creation Care Network** were present to offer a space to stay engaged with a like-minded network.

As we all settle back into our normal routines after a busy summer, let’s keep the conversations going! Let us continue our personal and family efforts for environmental stewardship. As healthcare professionals, let us be intentional in acknowledging the link between climate change and human health. Let us keep alive the work for creation care in our local congregations, our work, and our larger communities.

Lyubov Slashcheva, BA, DDS Candidate



Lyubov Slashcheva is a student at Virginia Commonwealth University (VCU) School of Dentistry in Richmond, Virginia where she expects to graduate in May 2016. Raised in Virginia's Shenandoah Valley upon emigrating from Kazakhstan, she completed her undergraduate studies at Eastern Mennonite University in 2011 and then interned with the Luke Society in Honduras and Peru for four months in a public health service role. Lyubov is a National Health Service Corps Scholar and has engaged in research and service opportunities pertaining to Latino, geriatric, and special needs populations. She holds leadership positions on the VCU campus and was elected in 2015 to serve on the Board of Directors of Mennonite Healthcare Fellowship. She looks forward to postgraduate training in dental public health, perhaps some specialty training in geriatric/special needs patients, and four years of public health practice in an underserved setting.

**The Effects of Climate Change on Human Health:
*Where do Justice, Missions, and Discipleship Fit?***



MWC Assembly Pennsylvania 2015 Friday, July 24—1:30-3pm
Lyubov Slashcheva

MHF President's Column

Eric Lehman, MD

I hope that you are finding helpful the articles in this edition of *Mennonite Health Journal* related to the significant meetings held this summer: the **Mennonite Church USA Convention** in Kansas City and the Mennonite Healthcare Fellowship (MHF) **Annual Gathering** in Harrisburg, Pennsylvania followed by the **Mennonite World Conference (MWC) Assembly** also in Harrisburg. It was personally rewarding for me to fellowship with many healthcare professionals from around the world at our MHF meeting. Following the Annual Gathering, it was inspiring to attend Mennonite World Conference as well.

This column reports on the significance of **two other meetings** that were held in conjunction with Annual Gathering and MWC Assembly.

Health Care Workers Meeting. This meeting of healthcare workers took place during the supper hour one evening at the MWC Assembly. It was co-sponsored by Mennonite Healthcare Fellowship, Mennonite Central Committee (MCC), and International Mennonite Health Association (IMHA). Interest in the event was great and approximately 125 people attended the Thursday supper meeting.

Beth Good, Health Coordinator for MCC and member of the MHF Board, acted as the moderator of the meeting which included the following short presentations:

- Herman Bontrager shared about the work of Clinic for Special Children involving inborn errors of metabolism among the Amish population and the Clinic's invitation to be a resource for international projects.
- Maurice Anyanga spoke about a project in Kenya to prevent the spread of HIV through education.
- John Martens shared briefly about the International Mennonite Health Association and its desires to support healthcare workers around the world by enabling them to have funding for special projects.
- I also shared about MHF and its role in supporting healthcare workers.
- Paul Leichty and Ray Martin gave a short report on the MWC **Global Health Care Leaders Summit** and the resulting interest in a Global Anabaptist Health Network.

Global Health Care Leaders Summit. This meeting was held prior to MWC Assembly and partially overlapped with the MHF Annual Gathering. The Summit was sponsored by Mennonite World Conference and was facilitated by Mennonite Health Services Alliance (MHS) which works with health-related organizations in the United States. MWC is interested in supporting this networking effort under one of its commissions.

The goal of the Summit was to explore the possibility of a Global Anabaptist Health Network (GAHN) of healthcare institutions and professionals. The vision for GAHN is that it would strengthen the witness of the Anabaptist community of faith, provide mutual encouragement, promote sharing through peer learnings, and foster institutional and professional partnerships. Approximately 75 international representatives of health care organizations and interested individual practitioners attended the Summit and made the decision to take small steps

toward a movement toward the vision of GAHN in developing a global communication network for mutual support and sharing of resources.

Many Anabaptists are working around the world to improve health care and feel the need for a means to foster communication and mutual help in our common efforts to reach the goal of better health for all people. Leaders of the Summit came away with a sense that it is important to make this a grass roots movement from the outset. It is hoped that the pitfall can be avoided that would create a Western-style organizational structure too quickly and require a high cost to maintain which may exclude those with limited resources.

Executive Director, Paul Leichty and I represented Mennonite Healthcare Fellowship at two sessions of the Summit that specifically discussed the GAHN proposal. Beth Good, MHF Board secretary-treasurer, also attended as a representative of MCC.

MHF representatives also were present for some follow-up discussions. Out of those discussions, Rick Stiffney, CEO of Mennonite Health Services is coordinating the next steps in the movement toward a Global Anabaptist Health Network. Steps may include building a database of Mennonite-related healthcare organizations and convening a group to plan a gathering similar to the Summit in 2018.

Both of these meetings demonstrate the ongoing interest among Mennonites to support efforts toward international healthcare. MHF members, with their considerable international experience, have much to contribute toward these efforts.



***Eric Lehman, M.D.**, is a physician in family practice from Archbold, Ohio. He has been serving on the MHF Board since 2012 and became President in September 2014. Eric graduated from Goshen College in 1982 and Ohio State University College of Medicine in 1986. Following his residency, he has been serving the Archbold community in family practice medicine since 1989.*