©All Rights Reserved Tweaking our Genes

Psalm 139:7-16

Where can I go from your Spirit? Where can I flee from your presence?

- ⁸ If I go up to the heavens, you are there; if I make my bed in the depths, ^[a] you are there.
- ⁹ If I rise on the wings of the dawn, if I settle on the far side of the sea,
- ¹⁰ even there your hand will guide me, your right hand will hold me fast.

¹¹ If I say, "Surely the darkness will hide me and the light become night around me,"

- ¹² even the darkness will not be dark to you; the night will shine like the day, for darkness is as light to you.
- ¹³ For you created my inmost being; you knit me together in my mother's womb.
- ¹⁴ I praise you because I am fearfully and wonderfully made; your works are wonderful, I know that full well.
- ¹⁵ My frame was not hidden from you when I was made in the secret place.

 When I was woven together in the depths of the earth, ⁶ your eyes saw my unformed body.

 All the days ordained for me were written in your book before one of them came to be.

2 Cor.5:1-10 (THE MESSAGE)

¹⁻⁵For instance, we know that when these bodies of ours are taken down like tents and folded away, they will be replaced by resurrection bodies in heaven—God-made, not handmade—and we'll never have to relocate our "tents" again. Sometimes we can hardly wait to move—and so we cry out in frustration. Compared to what's coming, living conditions around here seem like a stopover in an unfurnished shack, and we're tired of it! We've been given a glimpse of the real thing, our true home, our resurrection bodies! The Spirit of God whets our appetite by giving us a taste of what's ahead. He puts a little of heaven in our hearts so that we'll never settle for less.

⁶⁻⁸That's why we live with such good cheer. You won't see us drooping our heads or dragging our feet! Cramped conditions here don't get us down. They only remind us of the spacious living conditions ahead. It's what we trust in but don't yet see that keeps us going. Do you suppose a few ruts in the road or rocks in the path are going to stop us? When the time comes, we'll be plenty ready to exchange exile for homecoming.

⁹⁻¹⁰But neither exile nor homecoming is the main thing. Cheerfully pleasing God is the main thing, and that's what we aim to do, regardless of our conditions. Sooner or later we'll all have to face God, regardless of our conditions. We will appear before Christ and take what's coming to us as a result of our actions, either good or bad.

Today we continue our Summer Sermon Series on *Things that*Christians Disagree On by thinking about a very important subject that isn't mentioned in the Bible. Today's sermon is about genetics and some of the implications of the choices that our knowledge of genetics gives to us as Christians both now and in the future.

In 1984, Dr. George Church, a professor of genetics at both Harvard University and MIT and Walter Gilbert, first developed a way to directly sequence human De-oxy-ribo-nucleic acid. This substance that we commonly call DNA is found in every cell of our bodies, and it contains the genetic instructions that our cells use to develop and the function correctly, throughout our bodies. DNA is the blueprints that tells a cell how to become a cell in our eye or how to become a blood cell. It gives our cells instructions on how to see or how to hear a sound.

In 1984, Church developed a way to map human DNA. From then on, the genetic DNA research industry took off and in the year 2000, a working draft of the human genetic code was released to the general public. It was a huge accomplishment. For the first time in human history, the DNA of humans and human pathogens could be analyzed by both

scholars and industry. As a multitude of different corporations dreamed up applications and developed this new technology, today, twelve years later the cost to analyze the DNA of you, or of I has been reduced to less than \$10,000 and even that cost is rapidly dropping. As this DNA mapping becomes more common it is predicted that in less than a decade, knowing your DNA will become as cheap and as standard as a simple blood test. Soon, every person will know if they are genetically susceptible to a host of diseases. But along with the ability to draw up these genetic maps of each of our unique genetic blueprints, as humankind we now also have the ability to change our genetic instructions, and to recode our cells to act in ways that they never had before. While genetic engineering is just starting to influence human development, we also are facing questions that we have never had to think about before. And as Christians we want to be able to use our faith to influence our decisions about our genetics and about genetic engineering.

You should know that there are multiple positions on this issue.

Christians are on all sides and also on no side of this argument. One of the ethical positions that people have about Genetic Engineering is that everyone should have the right to be born with unaltered genetic code.

This is the idea that the unique genetic instructions that combined

themselves throughout the generations of your biological parents in order to make up YOU today, (even if you would be considered "defective" by others), still should have the right to exist. ---From this point of view, all human life, no matter how genetically messed up it is, has the right to exist in its unaltered state without genetic engineering.

On the complete opposite side of that argument are people who believe that all humans should have the right to be born without preventable diseases, free from genetic problems such as cystic fibrosis. This position believes that if we have the power to do so, and we **do not** alter someone's defective genetic instructions, that our inaction would be unethical and wrong. People with this position believe that an individual has a right to be free of a genetic disability, no matter how much the cost to human society.

Other differing positions on this issue is the question of who has the right to make decisions about an unborn fetus' genetic code. Does the right to change or not change those genetic instructions of a fetus belong to the parents? Or does the right to change a persons genetic instructions belong to our health insurance companies or to our government? Who owns our personal genetic instructions, and who pays the cost for their

mapping and alteration? And once the information is available, should our insurance premiums be based on whether we have correctly altered our "faulty" genetics or not? Should parents have the authority to abort a genetically faulty baby, and who gets to decide what diseases are tolerable in an unborn baby?

And compounding and complicating the discussions of all of these questions is the larger question of what does it actually mean to be genetically healthy? Should we treat a genetic tendency toward obesity the same as genetic predisposition to cancer? What about our physical characteristics? If we can do so, should we genetically cure things like scoliosis or the need for glasses or do we use our power of genetics to make everyone have blue eyes and stand six inches taller? How do we decide when someone is genetically healthy enough or intelligent enough or physically beautiful enough?

While we could spend all day asking questions about the implications of genetic engineering, today we are looking for Christian direction on these issues. But genetic engineering is not something that you will find in clear instructions about in the Bible. In fact, the cultures of the Bible and our culture are so very different it is difficult to get a clear biblical perspective

on genetics. For example, in the Old Testament, there is a valuation of male children and on continuing an unbroken line of genetic descendants of the Children of Israel, but in the New Testament, there is much less emphasis on genetic lineage: the gospel is to be shared with all people, whether they are Jewish or Gentile. While in the Old Testament you find the purity laws keeping the Hebrew people away from folks who are bleeding or diseased, in the New Testament, you had Jesus reaching out in healing to those who were sick and diseased and ostracized by society.

While the Bible does not give us specific instructions on what to do with our genetics, it does use an analogy about our bodies that may be a very way for Christians to think about these complicated issues. In our scripture passage today, in 2 Corinthians, Paul describes our bodies as a tent or a house. Our earthly bodies are rather like an old tent or an unfurnished shack in comparison to our glorified bodies that we will have when we are with Jesus. The passage also acknowledges our longing for perfected bodies and our desire to be stronger, taller, faster and smarter.

But this Biblical analogy of our body as a house combined with our thinking about our DNA blueprints is one that may lead us to some startling conclusions when we start thinking about genetics in that same way.

Many of us here have experienced the "joys" of home ownership. We have repaired leaky roofs, we have replaced windows, we may have even undergone a major project such as the complete building of a house or the challenge of putting on an addition. But with all of these changes to our homes, unless we voluntarily live in a historical district, we find ourselves being rather unconstrained with all of our home improvements. –If we can afford it and if we want it for our house, we do it. --- For example, if we want to move a wall from where the architect originally placed it, or add a bathroom to the main floor, or expand the kitchen into the dining room, we draw it up, get a building permit and make it so. If we use the Biblical analogy of treating the genetic engineering of our bodies like making a simple architectural change to our homes, then as Christians we could make the argument that we are completely free and unconstrained to use genetic engineering to make whatever improvements we want to our bodies.

Or are we? On the other hand, is it right for any Christian to live in a beautiful multi- million dollar home while there are people out there who are homeless or who are living in condemned buildings? --- The much loved organization, Habitat for Humanity doesn't think so. Habitat is a nonprofit, ecumenical Christian housing organization building simple, decent,

affordable housing in partnership with people in need. Their vision is a world in which everyone has a decent place to live. And if we apply the vision and the purpose and the theology of Habitat, of making sure that everyone has a decent place to live, to human bodies and to the changing of our genetic blueprints, we get a very different priority list for the use of genetic engineering. Instead of improving ourselves to be faster, taller and stronger and changing our eye color to baby blue, perhaps as Christians we should see our calling to use genetic engineering to make sure that all people on this earth to simply have a decent, although not perfect, body through which to experience the world?

In conclusion, I would like to give us all a situation to think about.

Imagine this situation for a minute. It is 2029, and a woman is pregnant.

As is standard procedure for every pregnancy, genetic testing on the fetus is done using a non invasive blood test on the mother. The results come back with a disturbing diagnosis. The technicians and the doctors all agree that the child will probably be born with Ausbergers syndrome. ---The doctors then tell you that people with Ausbergers are considered high functioning autistics. They may have difficulties with social interactions, may be physically clumsy, and they may use language differently than other people. Ausbergers children tend to not understand non verbal

communication and they often have limited empathy for others. --However, people with Ausbergers also often display an intense interest and an affinity in one particular area. The doctors tell you that there are many cases of children with Ausbergers becoming child prodigy musicians or having an intense interest and aptitude in a specific type of science or physics.

Because of this, you find out that there has been a movement among people with Ausbergers to not label their condition as a disability, but simply as a difference.

Because it is 2029, there is an experimental, although promising genetic treatment for children that have a genetic diagnosis of Ausbergers. However, like all therapies, it is seemingly most effective when corrected earlier in the pregnancy rather than after the child is born. The mother and the rest of the family all turn to you and ask you for guidance. What should they do?

Should they continue the pregnancy and hope and pray that the doctors are wrong and that the child will not have Ausbergers? Should they prepare themselves for a life caring for the special needs of an Ausbergers child? Should they go for the experimental, although promising genetic engineering procedure and try to correct the genetic predisposition

to Ausbergers in the child, or should they abort the fetus and try for another infant where they will not have to make these kinds of difficult decisions?

May all of us consider what we believe and our decisions on these e bear conviet the state of the matters carefully as we strive in every way to be the bearers of the love of