

The Genetics of the Incarnation

Dr. Douglas Hamp

M.A. Hebrew University of Jerusalem, Israel

Ph.D. Louisiana Baptist University

August 30, 2012

Category: Life Sciences

Sub-Category: Genetics

God promised several things about the coming of the Messiah. First, He promised that through Abraham's seed all the nations of the earth would be blessed. This means that Jesus had to come from the seed of Abraham, which means that there was a genetic link between Jesus and Abraham. Second, we know that Jesus had to be in the blood line of David in order to have the authority to be king of Israel. God promised to David that one of his descendants would be the ruler of all Israel. If Jesus was not related by blood (that is to say genetically) then He would have no right to sit on David's throne. Third, in order for Jesus to be our propitiation (substitution) and also High Priest, he had to be one of us, from Adam's seed. Therefore, the Scriptures declare that the Virgin would conceive and bear a Son. Jesus was connected genetically to His mother Mary as well as to Abraham, David, and Adam.

The Seed of Abraham and of David

Our first line of evidence concerning the genetic connection comes from the many prophecies that state that from the seed of Abraham and his descendants (with David being the most prominent) the Messiah would come in the flesh. God first announces that from Abraham's seed all the nations would be blessed: "And in thy seed [*zarakha* זָרַחְךָ] shall all the nations of the earth be blessed; because thou hast obeyed my voice." (Genesis 22:18 KJV) About one thousand years later, God promises to David in 2 Samuel 7:12 "[...] I will set up your seed [*zarakha* זָרַחְךָ] after you, who will come from your body, and I will establish his kingdom." The immediate fulfillment of this verse was realized in Solomon according to 1 Kings 8:19 "but your son who will come from your body, he shall build the temple for My name." However, Peter applies this promise ultimately to the Lord Jesus in Acts chapters 2 and 3:

- Therefore, being a prophet, and knowing that God had sworn with an oath to him that of the **fruit of his body**, according to the flesh, He would raise up the Christ to sit on his throne, (Acts 2:30).
- Ye are the children of the prophets, and of the covenant which God made with our fathers, saying unto Abraham, And **in thy seed** [*sperma σπέρμα*] shall all the kindreds of the earth be blessed, (Acts 3:25 KJV).

This ultimate fulfillment of the seed of David culminating in Jesus is also witnessed in the Messianic Psalm 89.

- Thy seed [*zarakha זרעך*] will I establish for ever, and build up thy throne to all generations. Selah... His seed also will I make [to endure] for ever, and his throne as the days of heaven... His seed shall endure for ever, and his throne as the sun before me, (Psalm 89:4, 29 and 36 (KJV)).

The New Testament is emphatic that Jesus would be from the seed of David—that is to say, He would be a blood (genetic) relative of David which would also make Jesus genetically related to Adam and hence all of the sons of Adam (humanity). “Has not the Scripture said that the Christ comes from the seed of David [*spermatos David σπερματος δαβιδ*] and from the town of Bethlehem, where David was?” (John 7:42). Paul specifically mentions this fact in his writings and marks that it will be the seed (*sperma σπέρμα*) of David:

- Concerning His Son Jesus Christ our Lord, who was born of the **seed of David** [*spermatos David σπερματος δαβιδ*] according to the flesh, (Romans 1:3).
- Now to Abraham and his seed were the promises made. He saith not, and to seeds, as of many; but as of one, And to thy seed, which is Christ. (Galatians 3:16 KJV)
- Remember that Jesus Christ, of the **seed of David** [*spermatos David σπερματος δαβιδ*], was raised from the dead according to my gospel, (2 Timothy 2:8).

We also see that Levi paid tithes to Melchizedek because he was still in the loins of his father Abraham and of course being a descendant means that one must be genetically connected. Stated plainly, Levi was (genetically) in the testes of his grandfather Abraham when the tithes were paid to Melchizedek.

- And indeed those who are of the sons of Levi, who receive the priesthood, have a commandment to receive tithes from the people according to the law, that is, from their brethren, **though they have come from the loins of Abraham**; for he was still in the loins of his father when Melchizedek met him, (Hebrews 7:5,10).

Our Propitiation

In order for Jesus to be our propitiation and also high priest, he had to be one of us, which the writer of Hebrews elaborates on:

- Inasmuch then as the children have partaken of flesh [*sarkos σαρκος*] and blood [*haimatos αιματος*], He Himself likewise shared in the same, that through death He might destroy him who had the power of death, that is, the devil [...] For indeed He does not give aid to angels, but He does give aid to the seed of Abraham [*spermatos Abraam σπερματος αβρααμ*]. Therefore, **in all things He had to be made like** His brethren [*opheilin kata panta tois adelphois omoiothenai ωφειλεν κατα παντα τοις αδελφοις ομοιωθηναι*], that He might be a merciful and faithful High Priest in things pertaining to God, to make propitiation for the sins of the people, (Hebrews 2:14, 16-17).
- For we do not have a High Priest who cannot sympathize with our **weaknesses** [*astheneiais ασθενειαις*], but was in all points tempted as we are, yet without sin, (Hebrews 4:15).
- He can have compassion on those who are ignorant and going astray, since he himself is also subject to **weakness** [*astheneian ασθενειαν*] (Hebrews 5:2).

The Virgin Will Conceive

Examining Scripture we see that there are many references to Jesus the Messiah as having been connected genetically (through the seed) to David. While it is true that the Bible records two genealogies of Jesus (Matthew's account gives Jesus' line through his adoptive father, Joseph)ⁱ we learn from the Lukan account, that Jesus is a blood descendant of David by way of Mary's line.

Nevertheless, there are some commentators who suggest that Mary acted as an incubator and there was therefore no genetic connection between her and the Lord, or between Him and humanity.

Christ would still be 'made of the seed of David according to the flesh' (Romans 1:3), because His body was nurtured and born of Mary, who was herself of the seed of David. He would still be the Son of Man, sharing all universal human experience from conception to death, except sin. He is truly "the seed of the woman" (Genesis 3:15), His body formed neither of the seed of the man nor the egg of the woman, but grown from a unique Seed planted in the woman's body by God Himself.ⁱⁱ

To suggest that Jesus' physical body was a completely unique and new creation and not connected to Mary and hence David, Abraham and Adam is to ignore the enormity of verses which attest to the contrary. Let's first start with the announcement of the miraculous birth of Jesus made by the angel Gabriel in Luke 1:31-35.

And behold, **you will conceive** [*sullepse συλληψη*] in **your womb** [*gastri γαστρι*] and **bring forth** a Son, and shall call His name JESUS. [...] and the Lord God will give Him the throne of **His father David** [...]" Then Mary said to the angel, "How can this be, since I do not know a man?" And the angel answered and said to her, "The **Holy Spirit will come**

upon [*epeleusetai επελευσεται*] you, and the power of the **Highest will overshadow you**; therefore, also, that Holy One who is to be born will be called the Son of God, (emphasis mine).

While this passage is well known, there are several factors that we need to focus in on to see conclusively that Mary did not simply act as an incubator for the Lord, but that she was in fact his mother on the genetic level as well. Grasping this important point will give us clarity as we consider the implications of Genesis 3:15. First of all, we note that Mary was a virgin and had "not known a man". The angel tells her that **she** will conceive and then give birth to a son. Notice that the angel does not merely say that she will give birth to a son, but that **she will conceive** (*sullambano συλλαμβάνω*). This is the same language that is used in the well-known verse of Isaiah 7:14 "[...] Behold, the virgin shall conceive [*hara הָרָה*] and bear a Son, and shall call His name Immanuel." The Hebrew word *hara הָרָה* is used 57 times in the Hebrew Bible and carries the normative meaning of the word. Basically stated, it is when a child is procreated from the sexual union of a man and woman - that is, it takes two to conceive. Let's consider just a few examples:

- Now Adam knew Eve his wife, and she conceived [*hara הָרָה*] and bore Cain, (Genesis 4:1)
- And Cain knew his wife, and she conceived [*hara הָרָה*] and bore Enoch, (Genesis 4:17)
- So he went in to Hagar, and she conceived [*hara הָרָה*], (Genesis 16:4)
- For Sarah conceived [*hara הָרָה*] and bore Abraham a son, (Genesis 21:2)
- So the woman conceived [*hara הָרָה*] and bore a son, (Exodus 2:2)

The implantation of the man's seed is not enough; the woman provides her genetic information (seed) as well. In modern terms this is referring to the reproductive cells, called gametesⁱⁱⁱ which are the seed of the man (sperm) and the seed of the woman (ovum). Today we understand that the mother's ovum and father's sperm each provide half of the information (each providing 23 individual [i.e. haploid] chromosomes) to the zygote (fertilized egg or child) for a total of 46 individual chromosomes. To speak of a woman's seed is extremely precise language (which only serves to authenticate the Bible as being from God). **Thus to speak of the virgin or Mary conceiving means that her ovum (egg) absolutely must account for half of the chromosomes which Jesus' physical body was comprised of.** That being the case then Jesus was genetically connected to his mother Mary and hence his ancestors David, Judah, Jacob, Isaac, Abraham, Shem, Noah, all the way back to Adam.

What is Biblical Seed?

We know for certain from other Scriptures that when the biblical authors talked about seed (Hebrew *zera זֶרַע* and Greek *sperma σπερμα*) they were clearly talking about gametes (the reproductive material). Two of the most prominent deserve our attention:

After the destruction of Sodom and the loss of their mother, Lot's two daughters saw the need to preserve their father's seed. We read:

And it came to pass on the morrow, that the firstborn said unto the younger, Behold, I lay yester night with my father: let us make him drink wine this night also; and go thou in, [and] lie with him, that we may preserve **seed** of our father, (Genesis 19:34 KJV).

The second of the two is perhaps as blatant as can be concerning just what is meant by seed: “And if any man's seed [*zara זרע*] of copulation go out from him, then he shall wash all his flesh in water, and be unclean until the even,” (Leviticus 15:16).

In summary, we note that the Scriptures are replete with statements that Jesus would come from the seed of Abraham and his descendants. If the Bible is this specific about the male seed, we ought not to question the Bible when it makes reference to the woman's seed in Genesis 3:15. Therefore the incarnation of Jesus required that He be connected to humanity genetically yet without sin.

The Genetics of the Messiah Becoming Flesh

The incarnation of Jesus was nothing less than the genetic combination of the celestial (Holy Spirit) and the terrestrial (Mary). We must stress, however, that Jesus as the second person of the Godhead existed from eternity past (Micah 5:2) and did not begin to exist at the Holy Spirit's overshadowing of Mary – He is eternal and has always existed. Nevertheless, the incarnation (becoming flesh) was at the point of conception which was when the Holy Spirit mingled seed (DNA i.e. information) with humanity. After waiting four thousand years the promise of the seed of the woman would be fulfilled. From the point of the incarnation God would begin the process of redeeming mankind that so long ago had sinned and corrupted the image of God as well as losing the ability to commune with God. This pivotal moment would then find its fulfillment in the crucifixion and resurrection of this God-man thereby giving men the right to become children of God once more.

Just What Is a Seed?

Our understanding of genetics and information technology (IT) helps to better understand what it means that we were and are corrupted. The reality is that our DNA is in fact the source code of humanity and it is the essence of the “seed” that Scripture so often talks about. The term seed is in modern terms called a gamete which in the male is the sperm and in the female is the ovum. Thus when Mary conceived it meant that her ovum provided 23 chromosomes and hence the Holy Spirit provided the other gamete (23 chromosomes). While it is possible that the Holy Spirit provided actual “sperm”, it is unlikely. Sperm (from the male) would be likened to a missile which is carrying a

warhead. The warhead is what causes the explosion and the missile simply gets it to the destination. It is not the carrying mechanism which is truly significant for conception, but the "payload" - that is the genetic material (information) that the sperm is carrying. Thus the Holy Spirit provided the 23 chromosomes without the carrying mechanism. Given that the Holy Spirit (the third person of the Godhead) came upon her, there could not have been any need for millions of seed. The Holy Spirit must have placed only one gamete (or set of 23 chromosomes) directly into Mary's ovum, which necessarily resulted in the body for the Lord Jesus.^{iv}

Our Genetic Code

When most of us come to a computer, we are interested in the applications that we can use to help us do our work, surf the internet, play games, or watch movies. Underlying those processes is a code that is written with ones and zeros. All of the applications are reduced to a binary (base two) code which a machine can understand. Even the most sophisticated computer program is reduced to a series of ones and zeros. In every living creature there is a coded message that is not a base two but a base four code known as DNA. Dr. Gitt in his book *In the Beginning Was Information* describes how DNA is a store of information:

The storage medium is the DNA molecule (deoxyribonucleic acid) which resembles a double helix. A DNA fiber is only about two millionths of a millimeter thick, so that it is barely visible with an electron microscope. The chemical letters A, G, T, and C are located on this information tape, and the amount of information is so immense in the case of human DNA that it would stretch from the North Pole to the equator if it was typed on paper, using standard letter sizes. ^v

This storage medium is capable of copying itself with astounding precision as Dr. Gitt explains:

The DNA is structured in such a way that it can be replicated every time a cell divides in two. Both of the two daughter cells have to have identically the same genetic information after the division and copying processes. This replication is so precise that it can be compared to 280 clerks copying the entire Bible sequentially each one from the previous one with at most one single letter being transposed erroneously in the entire copying process.

When a DNA string is replicated, the double strand is unwound, and at the same time a complementary strand is constructed on each separate one, so that, eventually, there are two new double strands identical to the original one [...] One cell division lasts from 20 to 80 minutes, and during this time the entire molecular library, equivalent to one thousand books, is copied correctly. ^{vi}

The Master Programmer endowed us with perfect code and only at the fall of man did it become corrupted. This chemical code, built on the A, G, T, and C, becomes corrupted as a result of a shuffling of the order of those bits or a loss of one or more bits. Loss of data occurs through replication and through the decomposition of the medium (cf. CD ROM). Adam, as the father of the race and a direct creation of God, had a perfect code. There was no loss of data or corruption of the data in any way. Once he and Eve sinned, death (errors in the genetic code) entered our first parents and those errors have not only been passed to all of their descendants, but the loss of data has been increasing over time as would be consistent with data loss in the world of computers. John Sanford notes that this degradation of data is cumulative and will one day result in the extinction of the human race in his book *Genetic Entropy and the Mystery of the Genome*: "The extinction of the human genome appears to be just as certain and deterministic as the extinction of stars, the death of organisms, and the heat death of the universe."^{vii}

Information is Non-material

We must keep in mind that DNA is simply the medium which stores information. Information, however, is something distinct from the medium (or storage device). In his book, *In the Beginning Was Information*, Dr. Gitt explains the difference between the two:

Information requires a material medium for storage. If one writes some information with chalk on a blackboard, the chalk is the material carrier. If it is wiped off, the total quantity of chalk is still there, but the information has vanished. In this case the chalk was a suitable material medium, but the essential aspect was the actual arrangement of the particles of the chalk. And this arrangement was definitely not random, it had a mental origin. The same information that was written on the blackboard could also have been written on a magnetic diskette. Certain tracks of the diskette then became magnetized, and also in this case there is a carrier for the information.^{viii}

An average blank CD ROM costs just pennies; it is the information on that disc which can cost hundreds, thousands, or even millions of dollars. However, regardless of how much data is written on the disc, the disc does not change at all in how much it weighs. Thus information is separate from the device holding it. The loss of data by erasing chalk from a chalkboard is analogous to the loss of data in our DNA. Of course, not all of the data in our DNA has been lost but a significant part of the message has been compromised and now the errors are being compounded with every successive generation. Humanity is suffering from an information loss in our own source code.

The most amazing thing about the seed (DNA) is the information that it contains, which was placed there by our Maker (the Master Programmer). What the modern science of Information Technology is just now discovering is that information does not just happen (which incidentally, is an incredible proof for God and against evolution). Dr. Gitt explains that information is a fundamental entity and is therefore, not a property

of matter. He formulates several theorems in order to describe information. In theorem 1 he states: "The fundamental quantity **information is a nonmaterial** (mental) entity. It is not a property of matter, so that purely material processes are fundamentally precluded as sources of information," (emphasis mine).^{ix} In theorem 3 he notes that it is information which "comprises the nonmaterial foundation for all technological systems and for all works of art."^x

If the information that we originally received from God is being compromised such that one day the entire human race will suffer the ultimate data corruption known as extinction then we clearly need the Master Programmer to fix the source code. Fortunately, our Maker has provided a way for our code to be corrected. However, it required that the Maker Himself take on our code, mix it with His own and then offer His blood. Through rebirth we are guaranteed a new body (eternal life) and we have been given the Holy Spirit as the down payment. Thus in the world to come our DNA (our code) will be restored and upgraded.

Normal Conception

Before we try to understand the genetics of the incarnation we need to have a grasp of what happens at the point of a normal conception. During the process of procreation approximately 250 million sperm swim toward the ovum. Both the ovum and the sperm are essentially very similar information. The sperm have a flagellum which propels them on their quest but the genetic information that they carry inside is what is truly significant.

Our body's cells have forty-six individual chromosomes or twenty-three pairs (diploid). However, the egg and sperm cells have only twenty-three individual chromosomes such that when they combine (during fertilization) they will equal the forty-six individual (twenty-three diploid) chromosomes necessary for human life. The process by which the somatic (body) cells (forty-six chromosomes) are divided is called meiosis. The cells created, which are just the twenty-three individual chromosomes, are called haploid cells. During reproduction, the maternal and paternal gametes (haploid cells), "fuse at conception to produce a zygote, which will turn into a fetus and eventually into an adult human being" according Silke Schmidt writing in the Genetics Encyclopedia.^{xi} The Encyclopedia Britannica summarizes the process: "When two gametes unite during fertilization, each contributes its haploid set of chromosomes to the new individual, restoring the diploid number."^{xii}

The Incarnation

As we stated before, we need to emphasize that Jesus did not begin to exist at the incarnation – He is eternal and has always existed. Yet, the incarnation was the point at which the Godhead mingled seed (DNA i.e. information) with humanity. Let's consider the mechanics of the incarnation from what we have studied so far. Keep in mind that the following summary does not pretend to account for the entire mystery of what it is for God to take on flesh, nevertheless, we seek to embrace all of the information that God has revealed through His Word. Nor does this explanation account for all the potential reasons the incarnation was necessary. However, looking at the incarnation from a genetics perspective does demonstrate how Jesus could become one of us and yet remain free from sin.

Peter Underhill, in Encyclopedia.com writes concerning the uniqueness of the Y chromosome and how it is passed from generation to generation unchanged:

Since normally only one Y chromosome exists per cell, no pairing between X and Y occurs at meiosis, except at small regions. Normally, no crossing over occurs. Therefore, except for rare mutations that may occur during spermatogenesis, **a son will inherit an identical copy of his father's Y chromosome, and this copy is also essentially identical to the Y chromosomes carried by all his paternal forefathers, across the generations.** This is in contrast to the rest of his chromosomal heritage, which will be a unique mosaic of contributions from multiple ancestors created by the reshuffling process of recombination, (emphasis mine).^{xiii}

This means that of the twenty-three individual chromosomes (haploid) in the gamete, only one (1/23) could potentially be a Y chromosome. Thus the other twenty-two chromosomes provided by the father's sperm will all be autosomes or non-sex chromosomes. If the twenty-third chromosome is an X, then the resulting person will be a girl. However, if the sperm is carrying that one Y chromosome then the baby will be a boy. Nevertheless, Peter Underhill has stated that there is essentially no change of the Y chromosome from father to son from generation to generation. The X's in contrast will be a mosaic of his multiple ancestors. Learner.org's online textbook states the peculiarity in another way: "The lack of recombination means that the entire non-recombining portion of the Y is passed intact from father to son. A **male shares the same Y chromosome with his father, paternal grandfather, paternal great-grandfather, and so on,**" (emphasis mine).^{xiv} Neil Bradman and Mark Thomas state the significance of implications of this reality perhaps as clearly as possible in light of our study in their article *Why Y? The Y Chromosome In The Study Of Human Evolution, Migration, And Prehistory*.

Genesis, chapter 5, records "the generations of Adam:" Adam begat Seth, Seth begat Enosh, Enosh begat Kenan... down to Noah of the flood. Translated into modern genetic

terms, the account could read “**Adam passed a copy of his Y chromosome to Seth, Seth passed a copy of his Y chromosome to Enosh, Enosh passed a copy of his Y chromosome to Kenan**” ... and so on until **Noah was born carrying a copy of Adam's Y chromosome**. The Y chromosome is paternally inherited; human males have one while females have none. What is more, the Y chromosome a father passes to his son is, in large measure, **an unchanged copy of his own**, (emphasis mine).^{xv}

This means that whatever information was encoded in Adam’s Y chromosome was passed on unchanged (virtually) to all of his descendants including all of us men alive today! However, if the information in the Y chromosome were faulty, then it would mean that all of his descendants (including us) would also have a faulty code. Discovering the exact make-up of the Y chromosome when Adam was first created is impossible for us to do, however, its current state may tell us something about the fall. The Y chromosome may in fact be a record of an event in the life of our original father. Bradman and Thomas suggest that the Y chromosome contains “a record of an event”^{xvi} in the life the man who passed on the current Y chromosome. However, because Bradman and Thomas are committed to the evolutionary paradigm they believe the event “had no effect on the life of the man in whom the change occurred nor, indeed, **on the life of his descendants**,” (emphasis mine).^{xvii} Is it possible that the recorded event is not something that had “little or no effect,” but is in some way the record of the genetic fall of our first father? Thus Adam not only died spiritually by virtue of losing the Holy Spirit, but his genetic information (as recorded specifically in the Y chromosome) was corrupted. God stated that in the day that Adam ate of the tree of the knowledge of good and evil he would die (Genesis 2:17).

Death, it appears, entered into Adam’s Y chromosome (in some way unique and different than the X) that very moment causing him to go from being genetically perfect to having serious errors in his code that would eventually cause a “crash”. Occasionally people who use computers will experience a scenario where the operating system experiences a “fatal crash”. The crash occurs because there is some conflict in the code of the program. Though the program may be able to sustain data loss for a short period, if uncorrected, the program will eventually crash. In Adam’s case, that crash took 930 years, but he did eventually experience a complete shutdown.

If that is correct, then the Y chromosome (and all of his chromosomes) must have been complete and whole before Adam fell into sin. We know that he was free from all imperfections because God created him and declared him to be good and because death entered into the world via Adam’s sin. Yet, the Y chromosome seems to contain something so deleterious that our savior could not have shared it. After all, every copy of the Y chromosome (that is, every male descendant of Adam) would necessarily have the

same genetic flaw that would also lead to the ultimate crash. In order to save mankind on a genetic level, a new Y chromosome would need to be provided. Furthermore, through the disobedience of Adam all of creation was made subject to corruption as Paul states in Romans 8.

For the earnest expectation of the **creation eagerly waits** for the revealing of the **sons of God**. For the **creation was subjected to futility**, not willingly, but because of Him who subjected it in hope; because the creation itself also will be **delivered from the bondage of corruption into the glorious liberty of the children of God**. For we know that the whole creation groans and labors with birth pangs together until now. Not only that, but we also who have the firstfruits of the Spirit, even we ourselves groan within ourselves, eagerly waiting for the adoption, the redemption of our body, (Romans 8:19-23).

In some way, Adam's disobedience and subsequent corruption spread to all creation. It could be, though we cannot be sure, that Eve was included under the "creation". In any event women are seemingly not excepted due to the fact that every daughter received twenty-three haploid chromosomes from her biological father who has a Y chromosome and therefore a man, carrying Adam's faulty Y chromosome, was directly involved in her procreation.

The Original Data Loss A.K.A. "Original Sin"

Scripture testifies to the "blue screen of death" which we could argue has been historically known as original sin. Paul discusses at length that all face the effects of sin (corruption) even though one man was responsible for bringing it into the world. "For since through man *is* the death, also through man *is* a rising again of the dead, (1 Corinthians 15:21 Revised Young's Literal Translation RYLT).^{xviii} Paul then reiterates and summarizes by saying: "for even as **in Adam all die**, so also in the Christ all shall be made alive, and each in his proper order, a **first-fruit Christ**, afterwards those who are the Christ's, in his presence," (1 Corinthians 15:22-23 RYLT). Jesus not only rose from the dead, but also mixed with mankind. Thus our resurrection seems to also entail being mixed with the Lord. Bible commentator Thomas Constable notes that the death and resurrection are not just some kind of "spiritual" entities but are in fact physical and literal.

Adam derived life from another, God; but Christ is Himself the fountain of life. Adam was the first man in the old creation, and, like him, all of his sons die physically. Christ is the first man in the new creation, and, like Him, all of His sons will live physically (cf. Rom. 5:12-19). [...] Both Adam and Jesus were men. Therefore our resurrection will be a human resurrection, not some "spiritual" type of resurrection. Physical resurrection is as inevitable for the son of Jesus Christ as physical death is for the son of Adam, (Constable Notes).

Paul has a longer discussion of how sin came into the world through one man (Adam) and how death, therefore, was passed or spread to all men.

Therefore, just as **sin came into the world through one man, and death through sin**, and so death spread to all men because all sinned – for sin indeed was in the world before the law was given, but sin is not counted where there is no law. Yet **death reigned from Adam to Moses**, even over those whose sinning was not like the transgression of Adam, who was a type of the one who was to come. But the free gift is not like the trespass. **For if many died through one man's trespass**, much more have the grace of God and the free gift by the grace of that one man Jesus Christ abounded for many. And the free gift is not like the result of that one man's sin. **For the judgment following one trespass brought condemnation**, but the free gift following many trespasses brought justification. For if, **because of one man's trespass, death reigned through that one man**, much more will those who receive the abundance of grace and the free gift of righteousness reign in life through the one man Jesus Christ. Therefore, **as one trespass led to condemnation for all men**, so one act of righteousness leads to justification and life for all men. For **as by the one man's disobedience the many were made sinners**, so by the one man's obedience the many will be made righteous, (Romans 5:12-19).

Though the sin of Adam was indeed moral in that he broke the command of God, the result was physical as well as spiritual. We have already discussed how his sinning resulted in immediate spiritual death – the loss of the Holy Spirit. However, it also appears from the two above passages that the concept of original sin – that is how we are born in sin – is due to the fact that every child of Adam is also a genetic copy of Adam and Eve (of course with genetic recombination). We might think of it like sour dough bread in which each time a new loaf of bread is made, a little bit of the starter dough is taken and thrown into the mix. In that way, the starter dough is in every new batch.

So it is with Adam's genes: we are all copies of him and therefore whatever coding errors he had would be passed on to us from the very point of conception. The fact that sin is attributed to Adam and not to Eve, though she was the first to break God's command seems readily explainable. When God formed Eve He took from his side which of course contains bone marrow. In bone marrow are the stem cells from which all other cells in the body can be replicated. Therefore, God merely borrowed some code from Adam (removed the Y chromosome and added a second X chromosome) and voila – a female clone of Adam. Upon seeing her, Adam even declared: "This at last is bone of my bones and flesh of my flesh; she shall be called Woman, because she was taken out of Man," (Genesis 2:23). Therefore we draw the conclusion that it was the master disc (Adam) that counts when making copies; Eve received her code from Adam. This understanding would certainly not detract from Adam acting as our federal head, but would serve to clarify how exactly that sin was passed and why we are "in sin" from conception.

The solution to the problem is analogous to the problem itself – also an idea that we have already examined in part; John states that “No one born of God makes a practice of sinning, for God's seed abides in him, and he cannot keep on sinning because he has been born of God,” (1 John 3:9). The new birth will not merely be a clearing of our debts (though thank the Lord it includes that!) but we will truly be reborn with new bodies. We get to take possession of our new bodies (with their correct DNA, i.e. information) in heaven. Until that time we have the Holy Spirit as a down payment (guarantee).

Reborn with the Seed of the Messiah

In Isaiah 53:10 we are given a very important aspect of our salvation. We see that the Lord was pleased to bruise the Messiah and offer Him up for our sakes. The text goes on to say that “He shall see His seed.”

Yet it pleased the LORD to bruise Him; He has put Him to grief. When You make His soul an offering for sin, He shall see His **seed** [*zera* זרע], He shall prolong His days, And the pleasure of the LORD shall prosper in His hand, (Isaiah 53:10,).

The Hebrew word used for seed (some translations say “offspring”) is *zera* (זרע) which is the same word that we looked at concerning the physical and biological offspring (children) of Abraham and David. The word very much meant someone who is descended from another. The question then obviously is how could the Lord Jesus have “seed”? While the Gnostic Gospels suggest that Jesus had sexual relations with Mary Magdalene and consequently had children, such talk is considered to be extremely heretical and anti-biblical.

How then, can the text be taken literally since it is not referring to the Lord having physical relations with a woman? The answer is found in 1 John 3:9 and 1 Peter 1:23 both of which refer to God having seed; “Whoever has been born of God does not sin, for His seed [*sperma* σπέρμα] remains in him and he cannot sin, because he has been born of God,” (1 John 3:9). 1 John 3:9 states very clearly that God’s seed (*sperma* σπέρμα) is in the believer because he has been born again. Said another way, one who is born again has God’s seed inside him. That means that all true believers have God’s seed in them. Peter confirms this when he says: “having been born again, not of corruptible **seed**^{xix} but incorruptible, through the word [*logos* λόγος] of God which lives and abides forever,” (1 Peter 1:23).

Peter adds that the quality of the seed is not perishable (*phthartos* φθαρτός) but is imperishable (*aphthartos* ἀφθαρτός). The living and abiding Word of God must refer to the Lord Jesus Himself (and not merely the text of the Bible) since the term Logos [λόγος] is used just like in John 1:1 which declares the Logos to be the one who created everything. John confirms being born of God in his first epistle when he says: “If you know that He

is righteous, you know that everyone who practices righteousness is **born** of Him, (1 John 2:29). This statement is then restated: “We know that whoever is **born of God** does not sin; but he who **has been born of God** keeps himself, and the wicked one does not touch him” (1 John 5:18).

Reborn with a New Image

The fact that we are born again through the Word of God points us back to Isaiah 53:10, which states that the Suffering Servant will see His seed. We are indeed born of God’s (or Messiah’s) seed which is why we are able to have a part in the age to come. Jesus could not have stressed this enough with Nicodemus when he said that we must be born from above and if we are not, then we will not have a part in the kingdom of Heaven. Jesus wasn’t just speaking allegorically. In fact, now with an understanding of information technology and also genetics and DNA, we can begin to grasp just a bit of what is going to occur when we come into the Lord’s presence. Here and now our DNA remains corrupted, but we who are trusting in the Lord are given the Holy Spirit as a down payment. When we, through the rapture or death, enter into the Lord’s presence we will be given our new bodies which will still be “us” but our DNA (our non-material information) will be repaired. In fact, from all that we have gained so far, we can conclude that we will literally be mingled (our DNA [information] combined) with the Lord for only His seed is imperishable (incorruptible). Paul greatly elaborates on this in I Corinthians 15, which we have examined already. We must be combined with His seed so that we can be like Him and be with him forever. It would seem obvious that man and his seed are perishable and corrupted. The fact that everyone eventually dies is proof that man’s seed is perishable; but God’s seed is incorruptible.

Conclusions of the Incarnation

As our understanding of genetics and specifically the Y chromosome stands right now, we are able to conclude that if Adam was corrupted genetically then his descendants would be too and something particular to the data errors in the Y chromosome was especially significant. That means that the data loss was extremely significant and as such crashes in the system will result in time. Since the Y chromosome is passed from father to son (identically), every son will experience the same data loss. Though women do not carry the Y chromosome, they are still under the curse (data loss) because every daughter has a father who is a son of Adam. Therefore, whether son or daughter, all have shared in the genetic loss that Adam first experienced. However in the conception of Jesus’ incarnation, the Y chromosome from Adam was not passed on. Therefore Jesus must have (in the flesh) had a perfect Y chromosome! Though while connected genetically to humanity by way of the X chromosomes, Jesus was not a carrier

of the Y chromosome which Adam had passed to all subsequent generations. Jesus became the first fruits of the resurrection because one day, by way of the “seed of God” that we have received as believers, we will mingle with our Creator.

We can thus summarize the genetic events of the incarnation as such: Jesus, who, as eternal God, is spirit (John 4:24). As the “source code”^{xx} of all living things, He is also the prime “data/information” which is/was non-material. His “information” was put into a medium. In order to encode the information in the physical medium (DNA) the Holy Spirit did apparently one of two options. He either: 1) made ex nihilo the DNA material (amino acids etc.) or 2) used the existing material in the egg, as the medium into which Jesus’ non-material spirit went into. The Holy Spirit then fused “the Jesus” gamete (spermatocyte) with Mary’s gamete (oocyte) (recall that a gamete contains DNA, which is stored information, which is a non-material entity). The fusion of the two gametes is when the incarnation (becoming flesh cf. John 1:14) occurred. The chromosomes from Mary and the Holy Spirit fused to make the (body of the) new Adam. Because Jesus is the second Adam, and because we are genetically connected with the first Adam, we must also be mingled with Jesus’ DNA (“He shall see *His* seed,” Isaiah 53:10, see also 1 John 3:9, 1 Peter 1:23).

ⁱ This line proves that Jesus has all the rights of the throne through his adoptive father Joseph. However, in no way can we say that Jesus was connected by blood to Joseph. If that were the case then the very idea of a virgin birth would be disqualified. If we look carefully at the Matthean genealogy, we see that it includes the cursed line of Coniah. In fact, if Jesus were connected by Joseph then He would be disqualified from being the rightful heir since God cursed that branch of the Davidic line in Jeremiah 22:28-30. “Is this man Coniah [Jechoniah] a despised, broken idol-- A vessel in which is no pleasure? [...] Thus says the LORD: “Write this man down as childless, A man who shall not prosper in his days; For none of his descendants shall prosper, Sitting on the throne of David, And ruling anymore in Judah.” What might have seemed like God shooting Himself in the foot was really just another example of Him being in control of the future.

ⁱⁱ Henry Morris, *Creation and the Virgin Birth*, Retrieved June 6, 2010 from: <http://www.icr.org/article/76/>.

ⁱⁱⁱ Gamete “sexual protoplasmic body,” 1886, name introduced in Modern Latin by Austrian biologist Gregor Mendel (1822-1884), from Gk. *gamete* “a wife,” *gametes* a husband,” from *gamein*, “to take to wife, to marry,” from PIE base **gem(e)-* “to marry” [...] This also is the source of the suffix in *monogamy*, etc..” Retrieved March 16, 2010 from: <http://www.etymonline.com/index.php?search=Gametes+&searchmode=none>.

^{iv} During sexual reproduction, approximately 250 million sperm are released into the woman's body where they begin to make an arduous journey in search of the ovum. Most never reach the egg and even those that do will fail because only one is permitted to enter.

^v Dr. Werner Gitt *In the Beginning Was Information*. 90 Bielefeld, Germany: Christliche Literatur-Verbreitung e. V., 1997, English Edition 2000.

^{vi} Ibid.

^{vii} John Sanford, *Genetic Entropy and the Mystery of the Genome*, October 2005, pg. 83.

^{viii} Dr. Werner Gitt, *In the Beginning Was Information* Theorem 24: (pg. 85).

^{ix} Ibid, pg. 45.

^x Ibid, pg. 49.

^{xi} Retrieved September 24, 2010, <http://www.answers.com/library/Genetics%20Encyclopedia-cid-50766>.

^{xii} Retrieved September 24, 2010, <http://www.answers.com/library/Britannica+Concise+Encyclopedia-cid-50766>.

^{xiii} Underhill, Peter A. "Y Chromosome." *Genetics*, 2003. Retrieved September 29, 2010 from Encyclopedia.com: <http://www.encyclopedia.com/doc/1G2-3406500290.html>.

^{xiv} Retrieved September 24, 2010 from http://www.learner.org/courses/biology/textbook/gender/gender_3.html

^{xv} Neil Bradman and Mark Thomas *Why Y? The Y Chromosome in the Study of Human Evolution, Migration and Prehistory*. See also <http://www.ramsdale.org/dna13.htm>.

^{xvi} Retrieved September 30, 2010 from: <http://www.ucl.ac.uk/tcga/ScienceSpectra-pages/SciSpect-14-98.html> Science Spectra Magazine Number 14, 1998.

^{xvii} Ibid.

^{xviii} Young's literal translation of the Bible seems preferable at this junction in that the phrase appears to be a predicate genitive – that is, no verb is actually present in the Greek. *επειδη γαρ δι ανθρωπου ο θανατος και δι ανθρωπου αναστασις νεκρων*, (1 Corinthians 15:21). My suggested translation is: "For (the) death (is) through (a) man, and the resurrection of the dead through (a) man." A. T. Robertson in *Grammar of the Greek New Testament in the Light of Historical Research*, page 395 states: "this copula is not always considered necessary. It can be readily dispensed with when both subject and the real predicate are present."

^{xix} Peter's text uses a variant word for seed (*sporas σπορας*) though the meaning is the same, cf. Thayer's Greek Definitions.

^{xx} The terms are simply meant to explain the process and in no way detract from who Jesus is as the eternal God.