# Science and the Bible

# A Search for Meaning & Significance

# **Human Origins**

### Welcome/Opening Notes/Prayer/Video

Foundational Principle for the Entire Study: Test everything. Hold on to the good. 1 Thessalonians 5:21

The Premise of this Study: The Facts of Nature and the Bible are the same.

### Introductory Comments

"Evolution seems to close the heart to some of the plainest spiritual truths while it opens the mind to the wildest guesses advanced in the name of science." (William Jennings Bryan)

According to Darwin's theory, the origin of humanity is on the top of the Tree of Life.

### Why should we care about Origin-of-Life and Human Origins Research?

- † They address the ultimate questions of life.
- † The students we know need to be equipped with factual information about these issues.

### The Two Main Views on the Origin of Life

Life is the product of purposeless Neo-Darwinian Evolution or a loving, designing Creator.

The End-Member References for this study are: The Descent of Man and Who was Adam?

### Human Origins According to Evolutionary Biologists

**Neo-Darwinian Evolution**: The very slow modification of a life form resulting from the naturalistic processes of random mutations and natural selection.

According to Darwin's theory, man simply evolved from lower forms of life: monkeys, apes and hominids.

The following quote is from Dr. Niles Eldredge, American Paleontologist, taken from his book

The Triumph of Evolution...And the Failure of Creationism: "Creation scientists have not managed to
come up with even a single intellectually compelling, scientifically testable statement about the natural
world. ... They pose no novel testable hypothesis and make no [worthy] predictions or observations."

### Who were the Hominids?

#### Hominid Characteristics: They were:

- † Bipedal primates
- † Created by God, but non-human (spiritless)
- † Soulish, but limited in intelligence and emotional capacity
- † Consisting of many distinct species, living from about 7 million to 12-30 thousand years ago

# Human Origins According to a Biblical Model

### **Biblical Texts on the Origin of Humans**

Genesis 1:26-27 Then God said, "Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground." So God created man in his own image, in the image of God he created him; male and female he created them.

Genesis 1:24-25 And God said, "Let the land produce living creatures according to their kinds: livestock, creatures that move along the ground, and wild animals, each according to its kind." And it was so. God made the wild animals according to their kinds, the livestock according to their kinds, and all the creatures that move along the ground according to their kinds. And God saw that it was good.

**Genesis 2:7** Then the Lord God formed the man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.

Biblical Model Predictions The Origins of Humanity should be traceable to a:

- † Single man and a single woman
- † Single location (near the Garden of Eden)
- † Recent origin
- † Rapid spread of humanity from near the Middle East

Information Drawn from Scripture Dating humanity's origin using Biblical genealogies:

- † Must understand that the main purposes of the genealogies are theological, not dating purposes.
- † The genealogies in Genesis 5 and 11 (as well as Matthew 11 and Luke 3) are not complete, because many names are omitted. The Hebrew word *ben* can literally mean son or descendant (i.e., grandson, great-grandson...) and the word *yalad* can mean either father or ancestor.
- † Using the genealogies to determine Humanity's origin yields the date:  $\sim$ 50,000  $\pm$  30,000 years ago.

## What Does the Biblical Model Have to Say About Humans & Hominids?

#### **More Biblical Model Predictions**

There should be a sudden appearance of:

- † Human fossils
- † Advanced cultural activity
- † Spiritual activity

A Comparison of Humans & Hominids should reveal:

- † Biological differences
- † Behavioral differences

#### Who were the Neanderthals?

The Neanderthals lived from about 250,000 to 30,000 years ago, primarily in Europe and Western Asia. Until recently, evolutionary biologists have considered them as the transitional ancestors of humans.

The following is a list of some of the anatomical features of Neanderthal that are distinct from humans: large eye sockets, large nose, large sinuses, large front teeth, poorly developed chin, underdeveloped parietal lobe, elongated foramen magnum, high larynx, thick bones, barrel chest, flatter skull base, large brow ridge, brain shape.

**The Image of God (Imago Dei):** How can it be detected in the distant past when humans were Created? The Image of God, which separates man from the hominids (animals), should result in distinctly different behavior, which should then result in distinctly different artifacts being found in the archeological record.

There are four unique traits (components) of the Image of God that God has imparted to humans:

- † Intellectual Component technical inventiveness, rational thought, symbolic thought, complex & abstract language, and artistic & musical expression
- † Moral Component inherent knowledge of right & wrong and a sense of justice
- † Spiritual Component a sense of God's existence, knowledge of a reality beyond the universe, and a sense of the eternal aspect of the human spirit
- † Relational Component an ability to relate to God, religious expression, relate to other humans, interact within social structures, and complex communication

# Human Origins According to Genetic Data (Molecular Anthropology)

### **Types of Genetic Analyses**

† Genetic diversity

† Mitochondrial DNA

† Y-Chromosomes

- Non-coding gene regions
- † SINE DNA
- Linkage disequilibrium
- † Pseudogenes† Microsatellite DNA† Human parasites
- † HERVs† Minisatellite DNA

### **Molecular Anthropology Studies**

The analyses of DNA sequences from a species can yield information about:

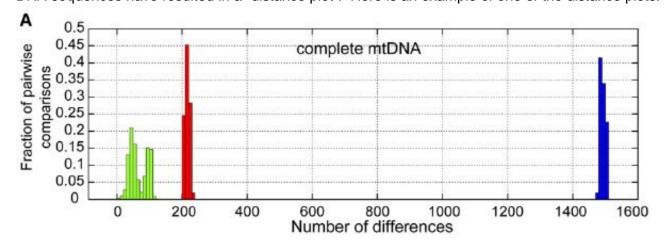
- † The genetics of the species, as well as the similarities & differences compared to other species
- † The extent of the differences between species
- † The differences in geographic locations of the species

The analyses of human DNA sequences have yielded the following information:

- † Original population size: small population, in fact, traceable to One Man and One Woman Note: Even atheistic scientists often refer to the first humans as *Y-Chromosome Adam* and *Mitochondrial Eve*, and this explanation of Human Origin as the *Garden of Eden Hypothesis*.
- † General location of humanity's origin: single location East Africa
- † Date for the origin of humanity: recent: ~ 50,000 years ago

Does an East African origin seem to conflict with Scripture? And if so, should it be a big concern to Christians? There are a few reasons this should not be a concern. Here are three of those reasons:

- (1) the conclusion of an East African origin is based on the assumption that the geographical location has been historically constant, (2) the Bible only implies that humanity's origin is near Mesopotamia and (3) there is no consensus among scholars as to the exact location and extent of the Garden of Eden.
- Comparative analyses of Human/Human (green), Human/Neanderthal (red) and Human/Chimpanzee (blue) DNA sequences have resulted in a "distance plot". Here is an example of one of the distance plots:



The following are the conclusions from the comparative analyses of these DNA sequences:

- † Neither Neanderthals nor Chimpanzees have a genetic or an evolutionary connection to Humans.
- † The DNA of Neanderthals & Chimps exhibit only a limited genetic diversity, compared to Humans.

Additional comparisons of Human/Chimp DNA:

- † Evolutionary biologists claim a 98-99% similarity.
- † However, when the entire genomes are compared, the similarity is closer to 67%.
- † And actually, the most important factor is 'gene expression' how and when genes are used.
- † And, Human/Chimp gene expression is radically different, especially relative to the brain.

# Human Origins According to Archeological Data (Bones & Stones Anthropology)

#### **Tool Use**

† Oldowan Technology (Mode 1) *Homo Habilis* ("Handyman") ~ 2.5 to 1.6 million years ago Biblical passages are taken from the NIV1984.

- † Acheulean Technology (Mode 2) Homo Erectus ~ 1.6 million to 250,000 years ago
- † Mousterian Technology (Mode 3) Homo Neanderthalensis ~ 250,000 to 30,000 years ago

All of these three modes represent very crude tool usage and only slight changes, until suddenly:

† The Cultural Big Bang in Late Stone Age Homo Sapien Sapien (Humans) ~ 40,000 ya to Present

### Quote from Dr. Christopher Stringer, British Anthropologist, taken from: African Exodus:

"Before then, [hominids] were simply marking time culturally. For millennia upon millennia, [they] had been churning out the same forms of stone utensils... But about 40,000 years ago, a perceptible shift in [the] handiwork took place...tool kits leapt in sophistication...Signs of the use of ropes, bone spear points, fishhooks, and harpoons emerge, along with the sudden manifestation of sculptures, paintings and musical instruments... We also find evidence for the first long-distance exchange of stones and beads... It's an extraordinary catalogue of achievements that seem to have come from nowhere..."

**The Cultural Big Bang**: Suddenly in the archeological record complex tools (e.g., detailed spear and arrowheads), sophisticated art (meticulous cave paintings/murals and figurines), musical instruments (elaborate ivory flutes) and jewelry (body ornaments fashioned from marine shells) began to show up.

Quote from Dr. Anthony Sinclair, British Archeologist, taken from a paper in *Nature*: "We imagine that the first artists worked with a small range of materials and techniques, and produced a limited range of representations of the world around them. As new materials and new techniques were developed, we should see this pattern of evolution in the archaeological record. Yet for many outlets of artistic expression – cave paintings, textiles, ceramics and musical instruments – the evidence increasingly refuses to fit. Instead of a gradual evolution of skills, the first modern humans in Europe were in fact astonishingly precocious artists"

### Summary

### Four Techniques Used to Determine the Date for the Origin (Creation) of Humanity

- † Biblical Genealogies: 50,000 ± 30,000 years ago
- † The Cultural Big Bang: ~ 40,000 years ago (not surprisingly later than the actual Creation event)
- † Mitochondrial DNA: ~ 50,000 years ago
- † Y-Chromosomes:  $50,000 \pm 4,000$  years ago \*
- \* This technique produces the most accurate date.

#### The Improbability of a Darwinistic Human Origin

- † Evolutionary biologist Dr. Francisco Ayala calculated the probability of a human evolving from a suite of one-celled organisms to be one in 10 1,000,000.
- † Astrophysicists, Drs. John Barrow, Brandon Carter and Frank Tipler found that Dr. Ayala made some false assumptions and recalculated the probability to be one in 10 <sup>24,000,000</sup>.
  - FYI: There are only ~10 65 atoms in the Milky Way Galaxy.

### **Fact-Based Arguments for Creationism**

- † There is no evidence that any of the Hominid species evolved into any of the other species
- † Human DNA tests prove the Biblical account (one man and one woman)
- † The Human Origin dating techniques generally agree
- † The Cultural Big Bang

<sup>&</sup>quot;Our planet is a lonely speck in the great enveloping cosmic dark." (Dr. Carl Sagan)

Questions?
Glimpse Ahead and Conclusion

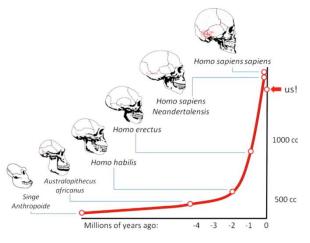
# Science and the Bible Addendum 2015

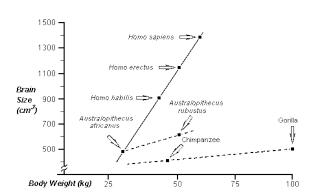
# A Search for Meaning & Significance

## **Human Origins**

"Let us try to teach generosity and altruism, because we are born selfish." (Richard Dawkins)

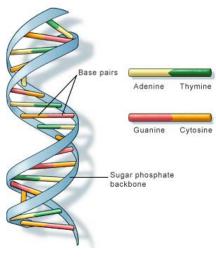
The Hominid and Human Brain Sizes: Evidence for Evolution? Absolutely not!





Species	Date range	EO
Australopithecus afarensis	3.9 – 3.0 Mya	2.5
Paranthropus boisei	2.3 – 1.4 Mya	2.7
Paranthropus robustus	1.9 – 1.4 Mya	3.0
Homo habilis	1.9 – 1.6 Mya	3.6
Homo ergaster	1.9 – 1.7 Mya	3.3
Homo erectus	1.8 Mya – 200 Kya	3.6
Homo heidelbergensis	700 – 250 Kya	5.2
Homo neanderthalensis	250 - 30 Kya	5.5
Homo sapiens	100 Kya - present	5.8

# DNA: Life's Information Storage Bins



- Every cell within every living entity, all plants and animals, contains a DNA molecule (Deoxyribonucleic Acid). Some scientists say the DNA of a life form "carries a complete blueprint of the organism"; however, that is an assumption, not a proven fact, because there are many aspects of life that do not seem to come from DNA.
- All DNA molecules have a wonderfully simple organization, consisting of many combinations of four bases (Adenine [A], Thymine [T], Guanine [G], Cytosine [C]), a sugar molecule (Deoxyribose), a Phosphate Group. The bases bond in very specific, limited patterns: A can only bond with T(A-T), G can only bond with C(G-C). The complex of a base bonding with a sugar molecule is called a Nucleoside. A Nucleotide consists of one of the four bases, a sugar molecule and a Phosphate Group. The Backbone (ribbon-like part of the DNA strand) is made from alternating Phosphate Groups and sugar molecules (each being part of a Nucleoside).
- ➤ While simple in its basic structure, DNA is incredibly complex, consisting of up to 1.5 billion base pairs.

"I think we're going to move from a [sic] Homo sapiens into a Homo evolutis: ... a hominid that takes direct and deliberate control over the evolution of his species, her species and other species." (Juan Enriquez)