WitnessKit 2 God And Creation

Class 14
Neandertal Genetics &
2 Sets of Neighbors in
Spain & Australia

Today begins the second half

Of the WitnessKit2 God and Creation Course.

We will begin with a brief overview of the second half.

The first half of the God and Creation WitnessKit2 course,

we studied 3 books about science. We studied--

- Of Pandas and People, which looks at the scientific case for intelligent design.
- The Case for a Creator which looks at the scientific case for God.
- And Dr. Marvin Lubenow's Bones of Contention, which looks at the quality of the data regarding the human evolution story.

Wrapping Up the Science Portion

- Today's Class 14 and Class 15 will complete *Bones of Contention*. Class 16 is left open to show a DVD or to have a group discussion, and to collect questions from the class.
- Here is a suggested selection of DVDs from which to choose:
- Expelled, No Intelligence Allowed, Premise Media Corporation.
- The Case for a Creator, Illustra Media.
- Unlocking the Mystery of Life, Illustra Media.
- Darwin's Dilemma: The Mystery of the Cambrian Fossil Record, Illustra Media.
- Icons of Evolution from the Center for Science and Culture, Coldwater Media.

The Legal and Cultural Portion

The creation/evolution controversy carries profound influences into the culture. With Class 17 we begin **legal and cultural aspects** of evolutionary theory. Classes 17 through 26 will cover three books by attorney and legal scholar **Phillip Johnson**.

- 1. Darwin on Trial
- The Wedge of Truth and
- 3. Reason in the Balance.

These resources will explain how words and legal authority are used to control the debate.

Today's Lesson: back to Bones of Contention

2 ways to falsify the evolution story: If humans and their ancestors lived at the same time and place, the story is false. If an overlap in time exists among hominids and their supposed ancestors, the story is false.

Another way to falsify human evolutionary theory: A mismatch between morphology and genetics.

If we review the facts <u>so far</u> from Bones of Contention...

Obviously the *human evolution story* is false.

Special creation of humans makes sense.

- It is morally superior to evolutionary theory.
- It fits the data much better. Only a few fossils fit the evolutionary story, while thousands of fossils fail to fit.
- Varying evolutionary frameworks contradict each other, but are consistent with special creation in unexpected ways.
- Special creation matches the things that <u>make</u> us human—and our <u>extreme differences</u> from animals.
- Special creation fits the rest of Biblical truth, which has much supporting evidence in history.
- Special creation matches our intuitions about the existence of God and of <u>objective</u> right and wrong.

If evolution were true, Morphology and Genetics would HAVE TO MATCH.

- Morphology is the form of the creatures. When talking about long-ago animals, morphology refers to fossil bones that are found.
- Morphology is the basis for the evolution story. The similarities among fossils led to the idea of the "tree of descent," or Darwinian "tree of life."
- Concerning humans, variations in skull and bone structure are supposed to show descent from a common ancestor with chimpanzees—with the split estimated to have taken place 5 to 7 million years ago.

If evolution were true, Morphology and Genetics would MATCH.

- Genetics refers to the transmission of DNA from parents to offspring. It is a field of science experiencing fantastic growth as the genomes of various species are defined.
 The descriptions in today's lesson are <u>preliminary</u>, as the field is growing very rapidly.
- The genetics most often studied regarding human evolution are the sequences in mitochondrial DNA, found in abundance in every cell. <u>Genetic changes are</u> the mechanism of the story of descent.
- This MtDNA genetic "fingerprint" is primarily transmitted from mother to offspring from the ovum, whereas the DNA of the nucleus comes from both parents.

We have on record

- Many fossils of humans and supposed human ancestors—thousands of fragments—primarily in the form of petrified bones.
- We have <u>a few fossils</u> in the human evolution story with enough material that is <u>not</u> petrified to be able to do some genetic testing of those fossils.
- The results are fascinating.

If the human evolution story were true

- The basis—morphology—would match the mechanics—genetics.
- Logically, if they match, the story might be true.
- If they do not match, the story is false.

We can have confidence in God's special creation of humans ...

Fossil

MtDNA

Characteristics

Among Hominids Because Fossil Hominid MtDNA falsify the human evolution story.

- Data Comparison with the African Eve framework.
- Data comparison of various fossils.
- 3. Experimental difficulties and results
- 4. Neandertal divergence from modern human DNA
- Neandertal divergence from chimpanzee DNA

We saw last class that

- MtDNA in the African Eve experiments gave us one fact: All human women <u>could</u> have come from one female human ancestor.
- All the samples in that study were from modern, living women from around the world.
- A computer program is the <u>only</u> thing that "went back in time."
- The results of the computer simulation were: all the samples could trace back to one source by series of single step changes in sequencing.

Most fossils are rocks. Even hominid fossils are mostly petrified.

- Rarely, the paleoanthropologists find samples with some organic material left.
- Enough organic material has been found in three fossil Neandertals to run tests.
- Other hominids that have been tested include
- 2 Cro-Magnons (pronounced Crow-Man-Yon)
- 1 Australian Mungo man—modern morphology
- 10 Homo erectus Australians—ancient morphology

Fossil MtDNA

Should tell us more about what really happened than a computer simulation from modern human MtDNA.

Here is what happened with the fossils. Look for a pattern.

| Fossil Type | Morphology | MtDNA |
|-------------------------------------|--|---|
| 2 Cro-Magnon— Europe | Near typical modern humans | Similar MtDNA to modern humans |
| 1 Mungo man— Australia | Near typical modern humans | MtDNA very different from modern humans |
| 3 Neandertal— Europe | Different from modern humans | MtDNA very different from modern humans |
| Homo <i>erectus</i> — 10 Australian | Different from modern humans— like small Neandertals— thought to be the oldest | MtDNA very similar to modern humans! |

The results are astounding.

- Morphology (form or shape of the bones) has no bearing on nearness to human MtDNA.
- If the human evolution story were correct, one would expect the Cro-Magnon and Mungo man to be near human MtDNA
- And the Neandertal to be <u>farther away</u> from human MtDNA
- And the Homo erectus to be even farther away.

Of the four types

- The two closest to modern human morphology had one set near modern human MtDNA and one far.
- The two farther from modern human morphology had one set near modern human MtDNA and one far.
- The pattern of morphology had no relationship to the pattern of MtDNA.
- Clearly the expected evolutionary progression based on morphology <u>did not happen</u>.

Because Neo-Darwinism

Requires a progression of genetic changes,

- And because the overall theory is based upon sequential morphological changes,
 - The failure of morphological change to match genetic change
 - Proves the theory is false.

What answer works to match the data?

All the members must be within the diverse range of human morphology.

All the members must be within the range of <u>human</u> genetics.

ONE HUMAN RACE!

We can have confidence in God's special creation of humans ...

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Difficulties with experimental results...

- The experimental techniques have a calibration problem.
- Because the experimental methods are so extremely sensitive to modern human contamination, modern human matches are discarded. They are ASSUMED to be contamination.
- Therefore, if the discarded samples were actually <u>fossil results</u>, that fact cannot be known.

Why is this a problem?

- Discarding modern matches skews (twists or dislocates) the data and makes the data depend upon the theory.
- If a sample is <u>like</u> modern human MtDNA, it will test that way.
- But then the researcher assumes it is contaminated and discards it.
- Then, nobody can know the truth, because the sample is discarded.

Thus, a large element of uncertainty is present in the reported results.

- If all the samples taken together <u>should</u> reveal a range of human MtDNA, that result is <u>masked</u> by discarding some data.
- (Some of this problem may be overcome by repeated testing, IF enough material is available for that. The number of fossil individuals with organic matter is small, so repeated testing may not have been feasible.)
- This problem overwhelms the reported results—actually reflecting a common error in lab work—where ALL results should be reported and assessed.
- IF all the discarded data were included, the actual data would be even MORE supportive of ONE human race rather than a progression of species.

Every Uncertainty

- Makes the human evolution story shaky.
- We have an understanding within our souls that we are a special creation of God.
- Every uncertainty in the human evolution story adds to the certainty of who we really are—
 "God's offspring," to quote the Apostle Paul in Acts 17.

We can have confidence in God's special creation of humans ...

Fossil

MtDNA

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Divergence from modern human DNA

According to the African Eve theory, the modern human MtDNA from 136 women in the African Eve experiment are assumed to set a molecular clock for about a 6 million year ago split from a common ancestor with chimpanzees. (5 to 7 million years ago)

According to the same theory,

The MtDNA from Neandertal samples is supposed to represent a split from the human ancestor line 550,000 to 690,000 years ago after roughly 90 % of the human evolutionary time had passed.

Divergence from modern human DNA

- It is likely that this means that a large portion of the Neandertal MtDNA tested is a match with modern human MtDNA.
- Since the Neandertals were ranked much older than modern humans, one would expect their different remaining MtDNA to be <u>nearer</u> chimpanzee MtDNA than modern human MtDNA is.

Here is another unexpected result...

The Neandertal MtDNA is <u>FARTHER</u> from chimpanzee MtDNA than modern human MtDNA is.

This Raises Two Questions:

- Is the molecular clock valid?
- Is the Neandertal MtDNA simply part of the human range?

This Raises Two Questions:

1. Is the molecular clock valid? If the data mean that Neandertals mutated faster than modern humans, going farther from chimpanzees than modern humans, but much sooner than modern humans, the molecular clock seems unlikely to be correct. This represents an uneven rate of change, rather than an evenly ticking "clock." This result requires a separate clock for Neandertals, or variable molecular clocks for portions of the molecule.

Some of the answer to that question has been found.

- Other studies of various species indicate that a fixed molecular clock is not valid. Certain portions of DNA in species are precisely conserved over time, where other portions vary over time. The conserved portions are assumed to be vital to the survival of the species. Thus, different portions of DNA have different clocks, with some at a change rate of ZERO.
- So the MtDNA molecular clock idea reflects an average change rate over the length of DNA molecules, with large variation from the average in portions of the molecule.
- But the Neandertal results are still unexpected and unreasonable, if the human evolution story were correct.

Second Question:

- Is the Neandertal MtDNA simply part of the human range? This seems more likely.
- The first question—Is the molecular clock valid?—calls the entire human chimp split into question. The second question—Is the Neandertal MtDNA simply part of the human range?—if answered yes, is perfectly consistent with special creation of human beings.

The combined effect

- The Neandertal MtDNA is consistent with viewing such hominids as members of the human race.
- Neandertal MtDNA is <u>in</u>consistent with one fixed rate molecular clock for human evolution.
- Thus, the Neandertal MtDNA is supportive of a creation story more than an evolution story.

We remember that:

Human evolution is false, according to evolutionary theory, if one of two tests is met.

- Human evolution is false <u>if modern humans</u> <u>lived at the same time as their supposed</u> <u>ancestors.</u>
- 2. Human evolution is false if a supposed ancestor continued to live long after it was supposed to be extinct.

Everyone should know the human evolution story is false because

2 Sets of Neighbors: A dramatic disproof of the story Of two sets of neighbors.

- Neighbors at the Sima de los Huesos Cave in Spain.
- Neighbors in Australia.

If Neighbors at the same time and place

- look like different members of the parade of human evolution...
- We can know the parade is not a true picture.
- The members are humans, not missing links.

If modern humans and supposed ancestors lived side by side

Their neighborhood shows human evolution to be false.

At two locations, human fossils

- Have been found that cover a wide range of morphology.
- That means that hominids formerly assumed to be evolutionary ancestors and descendants were alive in the same time in the same places.
- That demonstrates the human evolution story is false.

What does a cave in Spain tell us?

- Sima de los Huesos Cave has a deep, narrow bone pit containing at least 33 individual remains. The bones are a diverse set, covering all the morphologies of the rest of Europe's archaic Homo sapiens fossils.
- They make the distinctions between Cro-Magnon, Neandertal, and Homo sapiens insignificant, because they all lived at the same place during the same era. They used the same burial practice. This falsifies the human evolution story.

Neighbors at the Sima de los Huesos Cave in Spain.

- Remember that hominid fossils are very rare, and evolutionists claim <u>only a few dozen</u> are direct ancestors.
- Only once have 40 claimed ancestor remains been together at the same time in the same place on display in a museum.
- This cave has <u>THIRTY THREE fossil</u> <u>individuals</u> covering all the European morphologies <u>in the same burial shaft</u>. They were contemporaries.
- This is a significant number of hominid fossils.

That is a great amount of data

In hominid evolution terms.

- 40 supposed ancestors.
- □33 neighbors.
- Remember the quote in an early lesson about only "a few dozen ancestors" telling the evolution story?

More Neighbors in Australia.

- An additional three neighborhoods have hominids that defy the theory.
- Lake Mungo has 3 skeletons dated from 40,000 to 60,000 years ago which match modern human morphology.
- Willandra Lakes have 3 fossil individuals dated less than 10,000 years ago with modern human morphology.
- Kow Swamp has 6 individuals, some with Homo erectus morphology, dated 8,000 to 15,000 years ago. (Really late dating for H. erectus)

Summary Table: Australian Hominids

| Date | Location | Morphology | # of Individuals | MtDNA |
|------------------------|-------------------|--|---|----------------------------------|
| 40,000 to 60,000 YA | Lake Mungo | modern | 3 found, 1 with MtDNA | NOT matching Modern humans |
| Less than 10,000 YA | Willandra Lake | modern | 3 | |
| 8,000 to 15,000 YA | Kow Swamp | Some with Homo erectus morphology— expected to be very old | 6 found there, 10 H. erectus morphology tested from Australia | Matches modern aborigines |

If we look at their MtDNA

- Lake Mungo MtDNA does <u>not</u> match modern humans.
- The Kow Swamp MtDNA <u>does</u> match modern Australian aboriginal MtDNA. (The late date matches the modern MtDNA, as well.)
- This means that the homo erectus morphology and the modern human morphology existed in the same MtDNA population at the same time.
- Morphology is independent of MtDNA.
 Morphology does not demonstrate evolutionary ancestry.

But morphology was the clue

- That caused the human evolution story to be told in the first place.
- If morphology does not match a genetic sequence, the Darwinian story is false.

Our faith in our Creator

- Should be much strengthened by our studies. Our level of "intimidation" should be greatly reduced when we encounter blatant treatment of human evolution as fact.
- We can communicate these things to others who are in our sphere of influence.

Three ways human evolution is shown to be false:

- Humans and their supposed ancestors lived at the same time and place.
- 2. Humans' and their supposed ancestors' fossils overlapped for long periods of time of existence.
- The theoretical changes in bone structure over time do not match the genetic information from fossil remains.

Homework

In 3 Sets

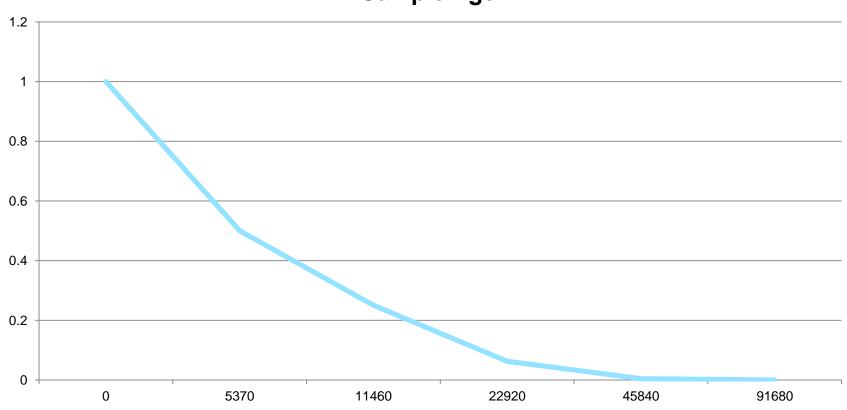
- The Apostle Paul uses bold words to describe spiritual warfare "against speculations and every lofty thing raised up against the knowledge of God." Hidden in his bold words is a promise. The promise is in the source of power to wage such warfare. What is the source of that power?
- What does this imply about God's wishes for people, and what does it imply that we can ask Him to do?
- Is it possible that the kind of speculation in the human evolution story is in the category St. Paul discusses?

- Read Introduction # 6 & Chapter 27 in BONES OF CONTENTION.
- How did the RATE project demonstrate that potassium argon rock dating is unreliable?
- What margin of error did the lab report?
- Were any of the samples actually within the margin of error?
- The calibration problem is clear, if the potassium argon method only "works" for samples of ages so ancient that nobody knows their real age, but fails spectacularly for samples of known age.

Carbon 14

- Carbon 14 can be used to date materials containing carbon from formerly living creatures. However, it is limited in how far back in time it can measure. Look at the chart on the next slide to understand why.
- Class 11 explained how the chart was created, and the meaning of terms. Review that set of slides for more information.

Ratio of Current Measurements to Initial Carbon 14 By Sample Age



- Looking at the chart on the previous slide, why do you think carbon fourteen was used to measure up to 40,000 years ago?
- Why would improved sensitivity increase the age range? Improved sensitivity means capability to measure smaller numbers of radioactive atoms.
- New techniques increased sensitivity to the 90,000 year range. What results were seen for fossil samples according to the RATE project?
- How old did the diamond test by carbon 14 dating?

- Read Genesis 9:1-7.
- After the deluge, God spoke precisely about the relative value of human and animal life. What was the basis for valuing human life more highly than animal life?
- Read Chapter 28 in BONES OF CONTENTION. What is the main point in chapter 28?

- Read 1 Corinthians 1:25.
- What bearing does this verse have on the discussion of origins?
- Read Introduction #7 and Chapter 29 in BONES OF CONTENTION. What Biblical reason does Dr. Lubenow give for rejecting theistic evolution?
- What do evolutionary scientists think about theistic evolution?

- What does Australopithecus mean?
- What classification, which translates to "handy man," does Dr. Lubenow believe are australopithecines in disguise?
- The australopithecines are animals, not humans. What are some reasons for excluding them from the human evolution story?