You may have heard the term, “ultraconserved DNA.”

Ultraconserved DNA was first described in May 2004, when a group led by David Haussler at the University of California, Santa Cruz, reported the existence of 481 stretches of DNA more than 200 base pairs long with completely identical sequences in mice, rats and humans. 1

The paper in question focuses on segments of 'ultraconserved' DNA — sections that have stayed exactly the same throughout recent vertebrate evolution, and are identical in humans, rats and mice (see page 10). The available evidence suggests that this extreme example of DNA conservation is no accident: the sequence stays because there is a strong selective force weeding out mutations in it. In other words, it is likely to be important to its host. 2

The basic assumption behind the term is that some parts of a creature’s DNA have not changed much over millions of years of evolution. That is, its DNA sequence has been “conserved.” If it hasn’t changed at all, then it is “ultraconserved.”

This terminology is based on the assumption that all DNA sequences are the result of random mutations filtered by natural selection, rather than design. Since the ultraconserved DNA segments are presumed to be the same because they have not changed during millions of years of evolution in different creatures, the existence of ultraconserved regions cannot be used to prove that these regions have not changed for millions of years. That would be circular logic.


An Amusing Waste of Time

Certainly there is value in examining DNA sequences, and attempting to correlate DNA sequences to functional results. Comparing DNA from various creatures is useful because it advances science in theoretical ways (basic understanding of life) and practical ways (medical breakthroughs).

Unfortunately, evolutionary scientists tend to get distracted in a futile attempt to reconstruct evolutionary history. DNA analysis can never establish the way in which creatures evolved if they are not really the result of evolution. It is an analysis that is doomed to fail, which wastes time, talent, and resources. It only results in some amusing conclusions. Here is one:

Only a single ultraconserved element has so far revealed its origins. By scanning genome data, Haussler’s group found that one human ultraconserved element is 80% similar to a piece of DNA found in a 400-million-year-old class of ancient fish that includes the coelacanth. The element had been shuttled into the fish genome by a genetic invader called a retroposon, but mammals have now co-opted it to boost expression of a brain-development gene called ISL1. 3

Unbelievable! They found one segment of fish DNA that is 80% similar to human DNA, and jumped to the conclusion that humans got it by a “genetic invader” and co-opted it to do something other than what it does in a fish. This is simply fanciful speculation, but it somehow got through the peer review process and was reported as scientific fact in a prestigious scientific journal.

Facts Foul Up the Theory

Unfortunately for evolutionists, ultraconserved DNA presents a difficult problem for evolutionists. Remember, these regions are supposedly conserved because they are critical to the life of the organism. Scientists intentionally damaged some of these ultraconserved regions in some mice, expecting them to die. The cause of death would show what function these ultraconserved regions performed. When they did the experiment, they got surprising results.

A colony of mice whose very existence defies logic could rewrite our understanding of human evolution, health and disease, researchers say.

[Nadav] Ahituv [a human geneticist at the University of California, San Francisco] made four mouse 'knock-outs', each one lacking a stretch of DNA between 222 and 731 base pairs long. These same stretches of DNA exist in human genomes, base pair for base pair. This 'ultraconserved' DNA is exactly the same across the long evolutionary distance between humans and mice and rats. So why the mice lived could answer fundamental questions about evolution. If it is really true that these segments of DNA have remained absolutely unchanged over millions of years of evolution because any change would make the creature unfit for survival, then changing them should kill the creature. But experiments have shown that mice can live without them. Apparently, there must be some sort of redundancy in the DNA code that allows the creature to function despite damage to these "critical" regions. It is almost as if the DNA code was designed to be robust enough to withstand some damage. But if that were the case, and if mutations in DNA have been going on for millions of years at the rate evolutionists believe, then these apparently redundant regions would have showed some mutations by now.

Our Rat Relatives

Finally, we cannot help commenting on "the long evolutionary distance between humans and mice and rats." Evolutionary distance is said to be long or short, depending upon what suits evolutionists the best. The reason has to do with Animal Rights and Evolution, which just happens to be the topic of this month’s Evolution in the News.

Animal Rights and Evolution

Science Against Evolution takes no stand on animal rights. We merely note that just as racial views have influenced scientific "truth" in the past, animal rights implications now affect evolutionary conclusions.

Facts have implications. Sometimes those implications can backfire. For a long time evolutionists have been stressing the similarity of man to apes. They wanted to imply that humans are almost apes. The more similar they could make apes and humans appear, the more plausible the theory of evolution.

Evolutionists didn't realize that when they were implying that humans are almost apes, they were also implying that apes are almost human. The double-edged sword did not go unnoticed by animal rights activists, however.

Spare the apes. That's the message from the Members of the European Parliament in Strasbourg, France. Last week, 433 of 626 MEPs signed a declaration demanding an end to experiments on great apes and non-human primates in Europe.

The declaration is not legally binding, but it is a barometer of opinion and must be formally taken into account by officials drawing up legislation in the European Commission (EC).

"It sends an incredibly powerful message to the commission, who are currently reviewing rules for animal experiments across Europe," says Animal Defenders International, the London and San Francisco-based lobby group that championed the declaration.

The declaration signed by the Members of the European Parliament sets forth four reasons (A, B, C, and D) for prohibiting ending primate experiments. Please note reason C.

C. noting that primates have a high level of intelligence, being the closest relative to humans, with certain species such as chimpanzees sharing 98% of human DNA.

The problem for evolutionists is that the more
scientific evidence there is that apes are almost human, the less scientists will be able to experiment on them.

You might wonder if that could explain the recent trend for scientists to downplay the similarity between apes and humans. If so, you are probably the kind of person who is skeptical of the research by scientists employed by the tobacco industry who say cigarette smoking isn’t harmful. You might disregard research by scientists employed by the drug industry who say drugs don’t have dangerous side effects. You might even doubt the research by scientists employed by the oil industry regarding global warming. Don’t you realize that scientists are impartial, unbiased, and always tell the truth regardless of who pays them? ☺

Ape Intelligence

The European resolution cited two similarities between apes and humans—intelligence and DNA. This month an article in Time magazine tried to dance around the problem of the intelligence of apes. They reported that a recent study showed

[Chimps, orangutans, and children] performed about equally well on “physical learning” — locating hidden objects, figuring out the source of a noise, understanding the concepts of more and less, using a stick to get something that’s out of reach. 7

But, lest that make apes too human-like, they were quick to say

But when it came to “social learning” tasks — such as understanding how to solve a problem by watching someone else do it, figuring out someone else’s state of mind from their actions, or using nonverbal communication to explain or understand how to find something — the kids made monkeys of the apes. 8

It is a tricky balancing act. Evolutionists have to convince us that apes have intelligence similar to humans to make ape to human evolution plausible, but they have to stress that apes have a different kind of intelligence to avoid the moral objections that animal rights activists might raise.

Ape DNA

Evolutionists usually fiddle with the numbers to try to make ape DNA as close to human DNA as possible. Last month we reported that evolutionists are now saying that our DNA isn’t that much like chimpanzee DNA. 9

Perhaps evolutionists will encourage animal rights activists to read the special Focus section in the 6 July 2007 issue of Science about the recently sequenced DNA of the sea anemone.

Moreover, the anemone genes look vertebratelike. They often are full of noncoding regions called introns, which are much less common in nematodes and fruit flies than in vertebrates. And more than 80% of the anemone introns are in the same places in humans, suggesting that they probably existed in the common ancestor. 10

The sea anemone DNA has an 80% similarity to human DNA, but the sea anemone certainly doesn’t need to have its rights protected, does it? ☺

Are We Mice or Men?

Our feature article in this newsletter contained a quote which mentioned “the long evolutionary distance between humans and mice and rats.” Ironically, one of our members recently sent us some pictures that he took at the American Museum of Natural History in New York, including one of their “tree of life.” The museum web site also has a picture of the tree, along with this explanation.

This is a tree of life—a diagram that shows how different types of living things, or species, are related. If you follow the lines connecting any two species on the tree, you’ll get an idea of how closely related they are. The longer the path is, the more distant the relationship. The 479 species listed on this tree represent only a tiny fraction of the more than 1.7 million species scientists have identified. … Generations of scientists have created tree-of-life diagrams by studying and comparing the physical features of different species. But this tree of life was made by comparing DNA sequences, with physical features playing a supporting role. 11

What interested our member the man’s place on the tree. The closest thing to Homo sapiens (modern humans) on this chart is Mus musculus (the mouse)!

Disclosure, August 2007, “Forget Everything”
http://www.amnh.org/exhibitions/permanent/humanorigins/past/tree.php

8 ibid.
9 Disclosure, August 2007, “Forget Everything”
11 http://www.amnh.org/exhibitions/permanent/humanorigins/past/tree.php
What point is the museum trying to get across by showing how closely related men are to mice? Remember, every museum display has a purpose. Why didn’t they include chimps or gorillas on the tree? Here was a perfect chance to show how close humans are to apes, but they didn’t take it. Do you wonder why?

Everybody has a point to make, and of course we do, too. Lest you misunderstand our point, let us spell it out as clearly as we can.

There are genetic similarities and differences in all living organisms. The amount of similarity or difference will depend upon what you measure and how you measure it.

One cannot determine from the amount of similarity how that similarity came to be. Similarity might be the result of a common ancestor, or it might be the result of a common designer. Terms such as “ultraconserved” are simply the result of an assumption of why things are similar.

I came across your site and read your first 2006 article on whales. I must say I am disappointed. Is this representative on the American education system? It is no wonder America is a failing country that must import its’ [sic] engineers and other academic talent. Firstly, nowhere in the Theory of evolution does it state that that one change negates another. What is the profound issue that a trait comes about twice? Bears have hair and so do we, thus my point completely negates yours. Relationships have nothing to do with traits. Closeness of relation was only a supposition until the advent of genetic science, which showed many of those suppositions correct. Secondly[,] Darwin concerned himself with Natural Selection, not with humans evolving from apes as your type so perverts his work. Thirdly, educate yourself. From a country that simply does not teach this, and is failing in EVERY category of education among its own population, I have no idea from whom you get your knowledge (considering there is ZERO information on the web that is publicly available to you), or why you feel you have the authority to comment on things you know nothing about (which can be seen in your flawed reasoning). If you would like, I can give you some actual LEGITIMATE arguments that are actually academic that would at least make your position plausible. But then again, I know you are surrounded by fake Ph D’s [sic] etc [sic] from religious diploma mills run out of some bedroom (why is it that is allowed in America anyway..the only country that does this). I realize any of my rantings are not going to make you rethink a better path for your ultimate cause, but I will leave you with this: At least fight what you have a small hope of winning. Stick to intelligent design via evolution in some form. You will NEVER win what you are after this way. Put your time and resources into something feasible or else the whole lot of you look fragmented and foolish. and [sic] finally, learn some website design. People are not fooled by your "No frills" sign as if you are
doing them some favor keeping it simple. Clearly you have NO idea about web design from the visual to the technical. I can’t possibly take you seriously or feel you have any intelligence to offer the topic, if you can’t get something as basic as web design down. It takes two days and a book to do something magnitudes better, I suggest you do it. If you cannot do something as simple as this, how can anyone expect to believe you have the smarts to comment on something as diverse and complex as evolutionary theory. [sic] I don’t mean any of this as a personal slam against your beliefs, but your are [sic] not going to win any converts by embarrassing yourself. Take care [sic]

Actually, we do agree with him on one point. The American public school science curriculum could be improved. However, the school system where he lives hasn’t served him much better. We hope that English isn’t his first language because that would excuse his grammatical errors. We were tempted to write to him, “If you cannot do something as simple as write grammatically correct English, how can anyone expect to believe you have the smarts to comment on something as diverse and complex as evolutionary theory? You’re not going to win any converts by embarrassing yourself.” Fortunately, we resisted that temptation.

Let us recap his points, one by one, such as they are.

Firstly, nowhere in the Theory of evolution does it state that that one change negates another. What is the profound issue that a trait comes about twice? Bears have hair and so do we, thus my point completely negates yours. Relationships have nothing to do with traits.

We have absolutely no clue what his point is. Why should we care a bear has hair? We can’t imagine which of our points his point negates.

Closeness of relation was only a supposition until the advent of genetic science, which showed many of those suppositions correct.

Genetic science has raised many more problems for evolutionists than it has solved, as we have shown in past newsletters.

Second[,] Darwin concerned himself with Natural Selection, not with humans evolving from apes as your type so perverts his work.

Apparently he never read this:

Of the anthropomorphous apes the males alone have their canines fully developed; but in the female gorilla, and in a less degree in the female orang, these teeth project considerably beyond the others; therefore the fact, of which I have been assured, that women sometimes have considerably projecting canines, is no serious objection to the belief that their occasional great development in man is a case of reversion to an ape-like progenitor. He who rejects with scorn the belief that the shape of his own canines, and their occasional great development in other men, are due to our early forefathers having been provided with these formidable weapons, will probably reveal, by sneering, the line of his descent. 12

Mark then says,

Thirdly, educate yourself.

That’s good advice from someone who doesn’t always capitalize the first letter in a sentence, doesn’t understand contractions, uses a period rather than a question mark to end a question, is ignorant of the many problems that genetics poses for the theory of evolution, and doesn’t know that Darwin wrote a book about human evolution.

I know you are surrounded by fake Ph D’s [sic] etc [sic] from religious diploma mills run out of some bedroom (why is it that is allowed in America anyway..the only country that does this).

We have written several times that our readers should judge arguments on their merits, not the credentials of the proponents of those arguments. No one associated with Science Against Evolution has a fake PhD. Yet he knows we are surrounded by them. But then, he knows a lot of things that aren’t true.

and [sic] finally, learn some website design. People are not fooled by your "No frills" sign as if you are doing them some favor keeping it simple. Clearly you have NO idea about web design from the visual to the technical.

Perhaps he has the latest web browser, so it never crashes because it can’t run a snazzy Java script. But children in the woefully inadequate American public schools, might be stuck with obsolete browsers connected to the Internet though painfully slow dial-up connections. That’s why we use the simplest HTML tags, default fonts, and as few graphics as possible. We don’t want anyone to be unable to read our material because they have limited equipment. We depend upon substance, rather than style, to make our pages interesting.

We are glad that Mark has given us this opportunity to address these issues.

Web Site of the Month – September 2007

by Lothar Janetzko

Creationism and Baraminology Research News

http://baraminology.blogspot.com/

“Baraminology…method of taxonomy based on Biblical ideas”

This month’s web site review looks at a web log, or blog, that is used to “publicize the research work done by members of the creationist community and the intelligent design community.” Similar to all blogs, the main web page is divided into two sections. The left section allows the reader to access links that provide more general information about the blog and links to archives going back to September 2005. The right section is used to present the links to the dated research work.

In case you have never heard the term “baraminology”, the blog author provides a detailed description of it under the link “Blog Information”. Here you learn that the “strict definition of baraminology is that it is a method of taxonomy based on Biblical ideas.” You also learn that “the goal of Baraminology is to develop a Creationist model of biology”.

The Wednesday, August 29, 2007, link tells you that the blog author is a student who is back at school and is busy learning Hebrew, reading Greek, and learning the history of Christianity. As such he is quite busy and new blog entries may be few. Nevertheless there are lots of past blog entries that a reader can study. When you review past blog entries, you will find that there are many interesting links to YouTube videos. These videos are quite informative and you can learn a lot about many different topics by watching them. One video that I found particularly interesting was the one about “Global Geological Outcrops and Other Implications of the Flood” by Ian Juby.

Just by reviewing the blog archives, I am sure the readers of this blog will find much information of interest regarding current creation research.

Disclosure

The official newsletter of Twenty-first Century Science Against Evolution

P.O. Box 923
Ridgcrest, CA 93556

R. David Pogge, President, Editor
Andrew S. Ritchie, Vice President
Susan S. Pogge, Secretary/Treasurer
www.ScienceAgainstEvolution.org