

An Analysis of the Genetics of the Supposed “Starchild”

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It is very difficult to maintain a sober composure when dealing with outright fraud and lies. With a good fraud, it is very difficult to find the flaws and it can sometimes take a significant amount of one's time to debunk. Recently, I have been reviewing the claims made by certain people involved with the ‘Starchild’ discovery, specifically the reports on the ‘Starchild’ genetics. Because I am not privy to insider information and because I did not take the time to track down witnesses, I am not able to prove any outright lies. However, I did find many lapses of reason, inconsistencies in analysis, and misunderstandings of technique. These folks don't know what they are talking about, and it shows. A pattern of deception is evident upon critical analysis. As a Christian, as a scientist, and as a lover of truth, I would encourage anyone looking into these claims to steer clear of the ‘Starchild’ and its most ardent proponents.

In order to make my analysis accessible to the average person, I am going to list and reply to a series of quotes from this page <http://www.starchildproject.com/dna.htm>. These are not necessarily in the same order as in the original but can easily be found in their short article.

"These nuclear DNA fragments have been analyzed by the National Institutes of Health BLAST program..."

In my work, I have used BLAST many, many times. This sentence immediately raises red flags in my mind. Note the tricky language here. The NIH was not involved in the process, yet an uncritical reader might be led to think they were.

The BLAST program does not do the analyzing by itself and the NIH does not run BLAST queries for people. Someone from this UFO organization, or their mystery geneticist, had to go to the website, enter the DNA, select a bunch of parameters, run the query and then interpret the results. Somewhere in this process they failed or lied.

It is easy to get a BLAST result like they did. All you have to do is enter gibberish. Or, you can set the parameters to something absurd (like demanding a 100% match for a chicken gene while searching the human genome). Or, sometimes the servers are busy and they kick back with the generic statement.

Any person can use BLAST. To search the human genome, go here:

<http://www.ncbi.nlm.nih.gov/genome/seq/BlastGen/BlastGen.cgi?taxid=9606>

Enter anything you like in the search box. Try a random string of As, Ts, Gs, and Cs. Here's a 300-letter pseudo-DNA string I made by holding down the shift key and hitting the A, T, G, and C keys as randomly as I could:

ATCGATGCTAGCTAGCTTAGCTAGCTAGGCTATATCGCTAGCTAGGCGTAGCTACGCGTCGCGC
TCGCTATCGCGCTGCGCATCGCTCGCTCGCGCTCGCATACTCGCTCGCTCGACTCGACTCTGCG
CTCGCTAGCTCAGCATACTGCGCTCGCTCGCTAGAGAATCGACGCATAGCTCTCGATCGCTTAC
GCTCACGCTGCTAGCTAGCTAGCTACGCTGATCGCCTCGCTCATGACTCGCATCATCATCATA
GCTTCGCTGCTCGTCGCTGCTCGTGCCCGCTAGCTCGTCAACTA

I put that in the search box, scrolled down and hit the “Begin search” button, waited a few seconds, and hit the “View Report” button on the next page (the query sometimes takes a few minutes to run, but this one was short and easy so the report was ready almost immediately). What were the results? “No significant similarity found”!

"No significant similarity found. For reasons why, click here."

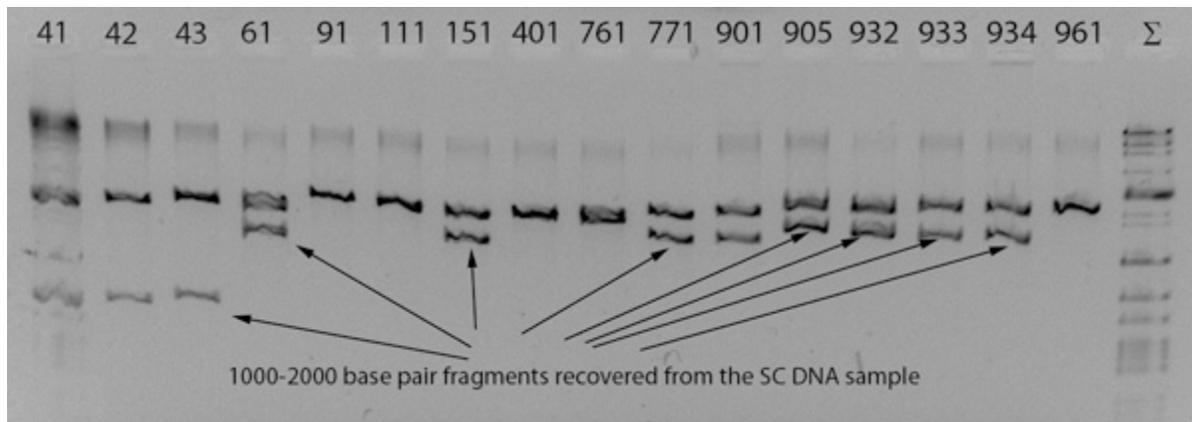
Note that no link is provided under "click here"! They just copied the text from the BLAST report.

"Trace Genetics had to use what was available then: long human-only primers made from many thousands of base pairs strung together."

1) Trace Genetics was bought by another company in 2005. Perhaps an interested reader can try to chase down someone in the new company that can give them some information on the ‘Starchild’ report (<http://www.bizjournals.com/eastbay/stories/2005/06/20/daily24.html>). I wonder if the parent company has maintained records one could use to verify the claims? This is not likely and they probably would not comment on a private contractual matter between them and a client. It would be nice if they had included the name of their contact at Trace, but that would mean others could double check the claims and I do not think the ‘Starchild’ adherents want that to happen!

2) No. Primers, by definition are short, usually no longer than 30-50 letters long. This is done deliberately. Very long primers will stick to more than just human sequences. In fact, the longer the primer, the less specific it is. Also, one can vary the sequencing reaction to get more or less specificity from the primers used. Also, we were able to sequence non-human DNA in 2003 (or I would not have gotten my PhD in coral genetics that year!). How was this possible if only "human-only" primers were available? Was this because Trace Genetics specialized in human paternity cases and could not or would not do anything else for the client?

Their discussion of "shotgun" vs. "primers" is riddled with inaccuracies. In fact, this clearly demonstrates their utter lack of expertise in the field. If they cannot understand the basics of what they are dealing with, we cannot trust them that they are getting the story straight, and we cannot trust their conclusions about ‘Starchild’ genetics.



The gel photo provided on the website (reproduced above under “fair use” standards) could be of anything. It is a standard, generic picture. I have generated many similar ones in my work. All it is showing is that there is DNA present. One could estimate the size of the pieces from the DNA “ladder” standard in the far right lane, but only if one knew beforehand which ladder standard was used, although it would probably be easy to figure it out. Note also that this DNA *was not recovered directly* from the ‘Starchild’ skull. An extract of genomic DNA would have made a smear, not discrete bands, and would have included very long pieces, not just the vague, dilute small stuff at the top of each column. These bands appear to have been generated by taking some DNA (from an unknown source) and running it through a PCR reaction that made millions of copies of the DNA. The fact that they got tight, definable bands tells me that they were using specific primers in this procedure. Thus, the DNA is of a known sequence! At least, the ends of the DNA in these bands must be identical to the primers used. What is in between might not be known perfectly.

Let me give an example of what would be expected in this case. When I was studying coral genes, I managed to find what I was looking for in one species and I got the gene sequenced. I then wanted to look in a second species, but I did not want to go through all that work again. So, I made primers for the gene in the first species and used them in a PCR reaction on the second species, but I used a lower temperature in the reaction so the primers would be more likely to stick if they were not a perfect match. When I ran the PCR products out on a gel (like in the photo), I got beautiful bands. I then cut those bands out of the gel, cloned the DNA, and sent it out to be sequenced. When I got the sequence back, I learned that I had found a second gene that was not identical to my first gene, but was in the same gene family. I did not know the beginning and end sequence of the new gene because, by definition, it had to be identical to the primers I used. However, in between the primers was a brand new gene never seen before.

Why did I go through that long description? To illustrate a point. If they got results like this for the ‘Starchild’ DNA, they are dealing with a known commodity or at least something within a known family of DNA sequences. A BLAST search should have identified it easily.

Lastly, I find it strange that a geneticist would share raw data like this with the customer. It proves nothing.

After the photo of the gel, with its “1000-2000” base-pair bands, they go into a description of the sequencing and BLASTing of much shorter sequences, one of which was human and one of which was unidentified. But why did they not go for the longer sequences? Is this a bait-and-switch? Or, do they not know what they are talking about? Perhaps an honest mistake? If they want people to believe their story, they cannot afford vagueness like this. I was already extremely skeptical by this point in the article. This just made thing worse, if that were possible.

Regarding these results, how do we know they sent a bone fragment from the ‘Starchild’s’ skull to the lab? And, for that matter, how does the lab know the bone they analyzed came from said skull? And, how do we know the skull is not a Piltdown-like fraud? And, how do we know these tests were actually done by the company? And, how did anyone rule out DNA contamination from the people who have handled the skull since its discovery? That last point alone invalidates any and all claims about DNA coming from the supposed skull (despite their lame discussion on controlling contamination on another page). "Trust us" is not good enough for science and is a phrase usually reserved for liars.

They are planning on sequencing the entire genome of the ‘Starchild’? Are you kidding me? I know sequencing technology has proceeded very rapidly and costs have come down, but this is absurd. It does not take an entire genome to prove ancestry! And, their preliminary analysis does not warrant an entire genome sequencing program.

Regarding the video on the page, there is not a single sentence I did not take exception to. For example, if two aliens made a fertilized egg and implanted the DNA from that egg in the egg of a human female, why does the ‘Starchild’ still have human DNA?

That is a short analysis of just this single page from their website. There are a few salient points remaining, however.

- 1) If alien and human DNA is so different, hybridization would be impossible. This is not only true on the sequence level, but the chromosomes have to pair as well.
- 2) One mutant skull does not prove a *pattern* of alien genetic engineering.
- 3) Why do aliens have DNA?
- 4) On the video on the main page, the speaker says something like, "This skull is a lithostereographic reproduction of the original" (big words for "plaster cast"), and then he knocks on it to demonstrate how thin and strong the skull is. Uh, isn't that a copy? And, if the original is made with unknown materials (~"fibers that can't be cut with a Dremel"), how did you reproduce the material properties of the original skull in the 'lithostereographic' copy?
- 5) Regarding those fibers, did anyone think to have them analyzed? Did anyone notice that not a single fiber in the photos seems to be penetrating the skull material? I find it amazing that they managed to cut parallel to *every* fiber. And, if the fibers can't be cut, how did they manage to cut into the bone in the first place? Oh yeah, they just happened to cut parallel to every fiber, even when cutting out a square hole.

The problems go on and on.

Summary: There is NOTHING useful here. No claims can be validated. Errors in understanding abound. A pattern of deceit is showing. They have no data with which they can work and have not provided anything for others to test their claims. We are asked to put all credulity aside and trust them. Why would I trust someone like this? As a Christian, I am commanded to "test the spirits" (1 John 4:1) and I conclude that this one is not from God!

For those of you looking for more answers on this topic, I would encourage you to keep seeking. There are resources that discuss this issue from a biblical perspective, without forcing meaning into certain passages based on the author's preconceptions, and there are several people involved in this issue with a solid understanding of the Scriptures and the implications of an alien presence on our world. Start here: <http://www.alienintrusion.com/main.html>.

For those of you *not* looking for answers but wanting to start an argument, let it be known, for the record, that I am not going to be answering e-mails on this subject. I know what "death by a thousand e-mails" feels like and I am not going to engage in it here. I agreed to do this analysis because I heard that some are claiming there are human beings walking around on this earth who cannot be saved because they have "Nephilim" or "alien" blood. I could not stomach such a heresy. If you are human, if you look human, if you think you are human, or if you think you are at least part human, then you are eligible for the promises God makes to us in His word. You can be saved. It is that simple.

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