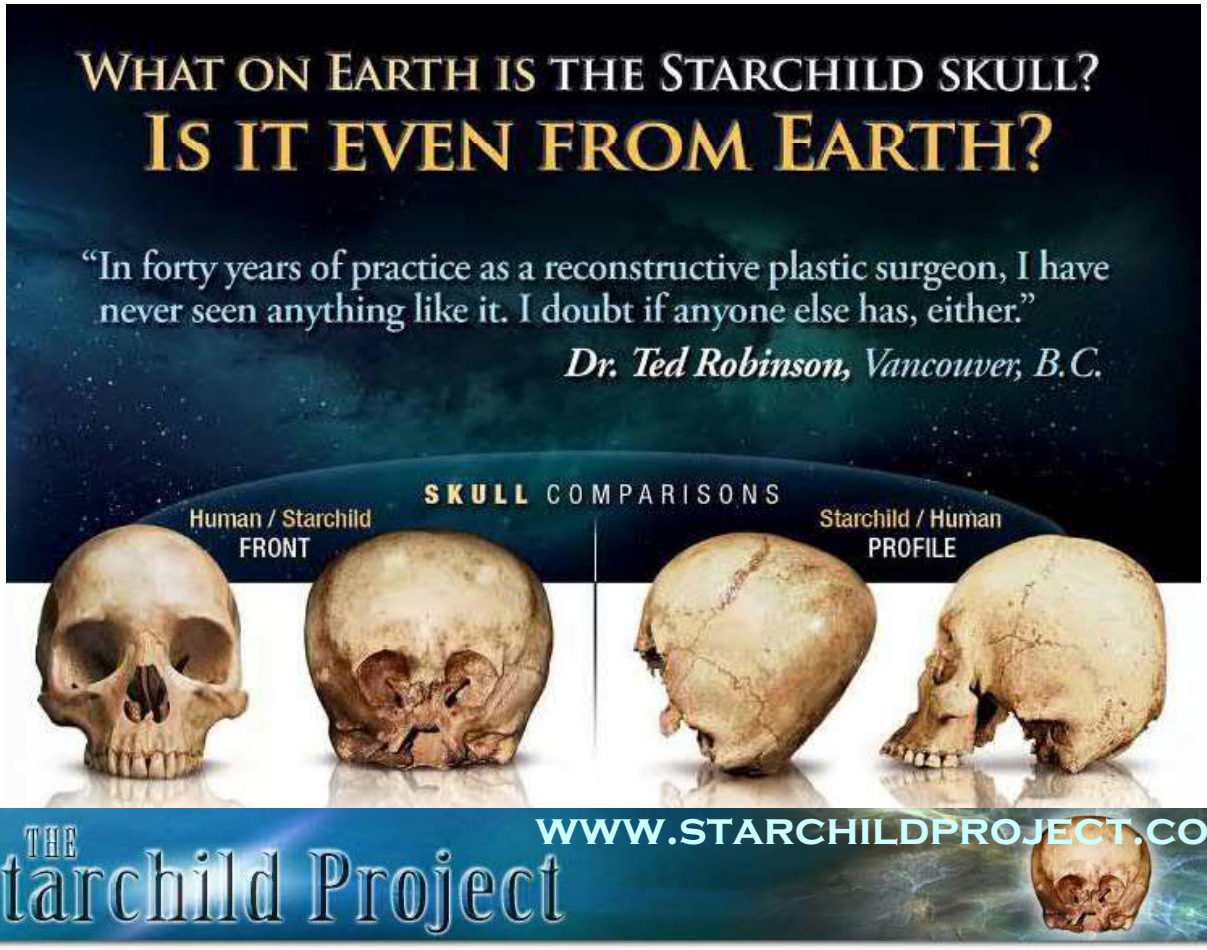
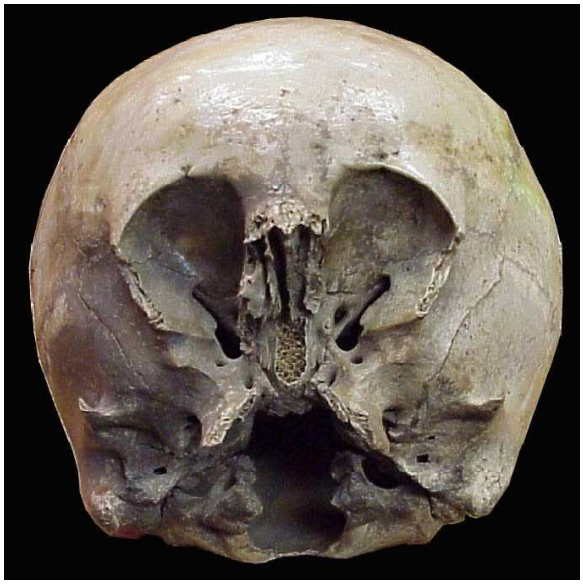
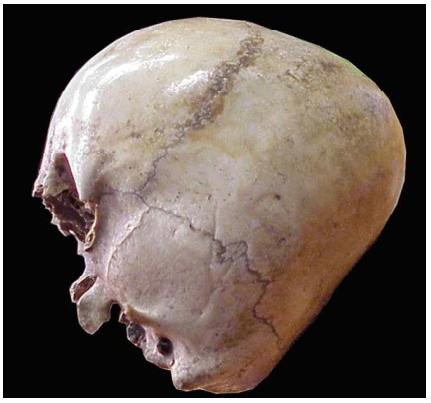


The Starchild Skull





The Starchild Skull is similar to a human skull - with all eight of the major human components evident—a frontal bone, two sphenoids, two temporals, two parietals, and an occipital. However, each component is profoundly redesigned, with the bone itself astonishingly reconstituted into something uniformly 1/2 as thick as normal, weighing 1/2 as much as normal. Choose 30 points of reference on it and compare them to the average of the same 30 points on 100 normal skulls. The result falls 10 Standard Deviations from the statistical norm—well off the chart.

THE Starchild Project
WWW.STARCHILDPROJECT.COM

It is always possible that some kind of sequencing error has been made, so it needs to be repeated to confirm this initial analysis. In any case, after the mysterious "stop" codon, a new Gln stretch begins and continues to only three amino acids from the fragment's end. This, too, is wildly different from the human sequence, but as with the other anomalies, further research is needed to determine what altered functions these differences cause.

Another comparison to make is to remove the Gln stretches from different species and examine what is left. For example, if we analyze the entire FOXP2 gene in humans and chimps, our closest genetic relative, with the Gln stretches removed from consideration, then only 2 amino acids (depicted by the three-letter codons) are different. The same 2 are found in gorillas and other higher primates. In mice, the difference is 3 amino acids.

If we remove the Gln stretches from the Starchild's fragment of FOXP2, only 7 amino acids remain to be compared to the corresponding amino acids of the human FOXP2. These are the first four, at the beginning of the fragment, and the last three, the end of the fragment, and all 7 amino acids are different! Whatever we might say about this comparison, it is certainly not between two humans, or anything near two humans.

In addition to having a "stop" codon in its last quarter, the Starchild fragment is also missing the large intron (marked with a vertical green arrow) that normally intervenes in the human gene and in the gene of other species. This suggests that the Starchild fragment could be a pseudogene, dysfunctional ancestors of normal genes that have lost the ability to encode proteins, or are otherwise no longer capable of being expressed in a cell. This means they are nonfunctional, and are therefore another form of junk DNA.

Suggesting the Starchild's FOXP2 fragment might be a pseudogene immediately collides with the fact that there is no currently known human FOXP2 pseudogene. Because it is a master gene, it must always function properly, and if it doesn't function properly in even a small way, very negative things happen to the individual carrying the variation. Thus, since a human FOXP2 pseudogene is not known to exist, if it turned out that the Starchild Skull carried one, that would clearly establish it as not human.

What's the bottom line? That can only be determined when the entire Starchild genome is recovered and compared—nucleotide by nucleotide, base pair by base pair, codon by codon, amino acid by amino acid—with humans, Neanderthals, Denisovans, chimps, and gorillas. Whatever it is, most of the preliminary evidence indicates it is quite distinct from humans.

Most important, perhaps, to keep in mind is that our FOXP2 results are preliminary, as are the results from the earlier nuclear DNA fragments, and the mitochondrial DNA fragments. All three preliminary results are highly indicative of what the final result will be, but they cannot be considered absolute proof. They can, however, be considered proof that absolute proof will come when the Starchild's entire genome can finally be recovered.

What Does This Mean?

In any comparison of DNA samples between the human CRS and an "unknown" species (which technically categorizes the Starchild), even a *few* variations between them in a short stretch of highly conserved nucleotides strongly indicates that the entire mtDNA genome of that species would contain many more than the 120 ± carried by the human haplotypes.

Such a difference, which is not hypothetical but actually exists within the Starchild Skull, is by itself sufficient reason to suspect a *new species* has been identified! Clearly such an extraordinary claim requires extraordinary evidence, but the preliminary results achieved so far with the Starchild DNA are immensely encouraging, to the point of near certainty.

To calculate the exact percentage of difference between the Starchild Skull and humans will require its entire genome to be sequenced using sophisticated technology such as the machines provided by 454 Life Sciences and/or similar companies such as Illumina. We intend to perform that sequencing as soon as we have the financial ability to do so.

See www.starchildproject.com for more information

Dedication to Lloyd Pye

This booklet/pamphlet is dedicated to my friend **Lloyd Pye**, who died from Lymphoma Cancer on Dec 9th 2013. He is sorely missed, both as a friend, and as a diligent and sincere researcher, author and authoritative and enthusiastic speaker.

I first met Lloyd in 2004, when he had made a trip to London to undertake new research into the "Starchild" Skull. I was honoured to meet and help him with some IT related matters. I couldn't believe he didn't already have some support in the areas I gave him a little bit of help with. It was clear to me that the **Starchild Skull** was a relic of vast importance. I was immediately friends with Lloyd – his sharp mind, warmth, humour and humility were a rare combination. Within an hour of that first meeting, these qualities, along with his expression of gratitude to me, cemented a decade-long friendship. Over this period, I had the pleasure of accomodating Lloyd on several occasions and he was always gracious and appreciative. He was a friend to everyone he met. We shared the desire to pass on important information we had learned - to anyone that would listen.

Lloyd even came along to at least 2 of my own presentations - he was also interested in what I had to say. I learned a great deal from Lloyd – not just about the Skull, but about The Electric Universe, Hominids and Hominoids, and important facts about human "evolution" (as it is called) that few other people discuss. I also learned from his experiences in dealing with scientists who would not look at the most important evidence that had ever been put under their noses – and those that *did* look at it, but wished to remain anonymous.

I shared his frustration when they refused to *look at the evidence* – or when they acted like they couldn't even see it. I also shared his delight when we would see people open their mouths in wonder – and try to comprehend why they had never heard about the Starchild Skull before…

I hope that by reading this booklet you will, like I did, learn about world-changing evidence and consider it carefully. Who knows, maybe it will have the same profound effect on you as it did on us…and you will choose to try and share what you have learned with others…

haplogroups. In such a strongly conserved area, multiple differences in a matched sample would immediately alert geneticists that something major might be unfolding.

Below is a screen shot of the 167 Starchild mtDNA nucleotides compared to the 157 in the human CRS. The top line of each row (highlighted in pink) is the Starchild Skull sequence, which starts at 167 and works backward to 1. In the complementary Human CRS sequence (the second line of each row) the base pairs start at #1269 and end at #1426 (157 total) in the mirrored fashion mentioned earlier.

```
>GRGEF1201AO7KP, 167..1 of 218 and chrM, 1269..1426 of 16571   (154/171 ident

167   TCTTCAGACCAAA-CCTGATAGGAAGGCTAACAAAGTAAGCGACAACGTACCCAACGTAAAGTACGGTTAG
1269  TCTTCAG--CAAACCCTGAT--GAAGGCT-ACAAAGTAAGCG-CAA-GTACCC-ACGTAAAG-AC-GTTAG

      GTACGAAGGTGTAGCCCATGAGGTGGCAAGAAAT-GGCTACATTTTCCTACCCCAGAAAACTACGATAG-
      GT-C-AAGGTGTAGCCCATGAGGTGGCAAGAAATGGGCTACATTTT-CTACCCCAGAAAACTACGATAGC

      CCTTATGAAACTTAA-GGTCGAAGGTGGAT 1      < STARCHILD SKULL
      CCTTATGAAACTTAAGGGTCGAAGGTGGAT 1426   < HUMAN CRS
```

Within the 167 comparisons above are 17 variations! *Seventeen!* That is *17 indels* of difference between the Starchild mtDNA and the mtDNA of 33 human haplogroups!

After repeated sequencing, *some* of those 17 differences *could* be confirmed as reading errors by the program, but it is virtually impossible that *all* of them would be errors.

2012 - FoxP2 Gene Discovered

Our geneticist has now recovered a fragment of the Starchild's DNA that is so powerfully convincing, even standing alone, we are confident it provides a tipping point in our quest to recover the Starchild's entire genome. He has secured a fragment of a gene from the 5% of human nuclear DNA that codes for proteins, and it does most of the work of keeping our bodies functioning as they should. This gene is not only functional, it is a highly functional "master gene," one of the most vitally important genes in the body of any species on Earth.

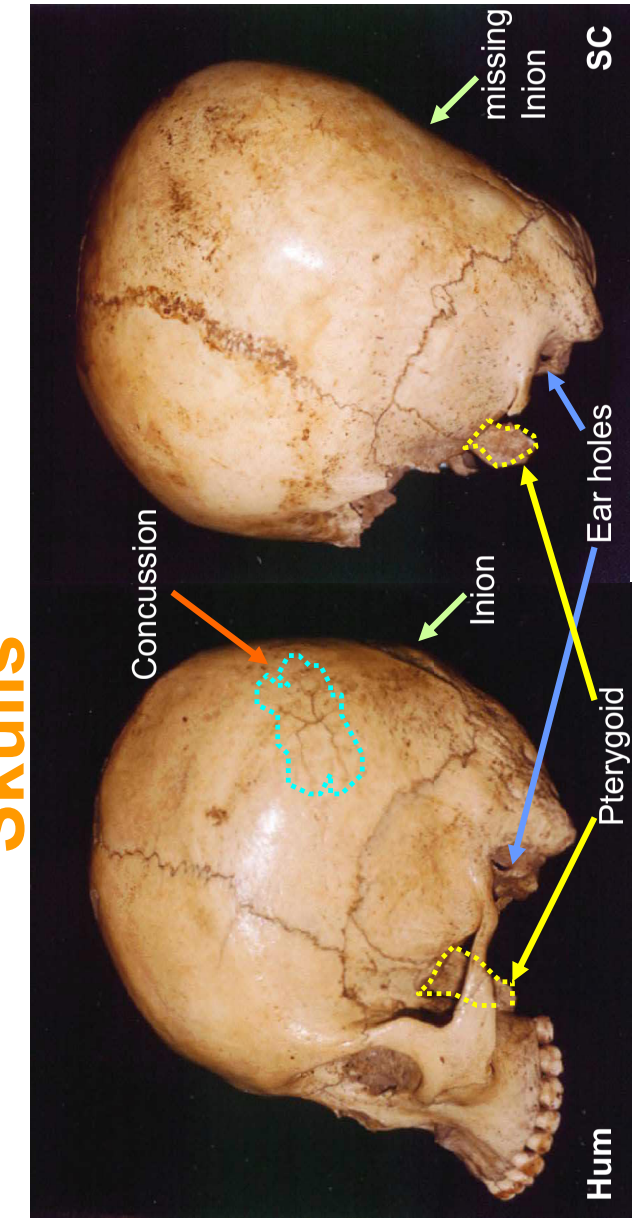
Virtually any complex species has a variation of this gene, and it is without question one of the most highly conserved genes in the human body. It is the FOXP2 gene. That odd name comes from its technical title: Forkhead Box P2, or FOXP2. Here is one of a wide variety of illustrations that try to capture its vast importance in a single image.

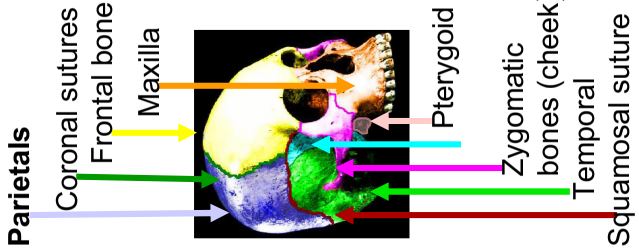
In any creature, the overwhelming importance of their FOXP2 gene is that it controls a "downstream" cascade of genetic processes in hundreds of other genes, all coordinating the formation of various parts of a body as it gestates and grows to maturity. In mammals and other "higher" species, any single flaw in FOXP2, any isolated mutation or variation, can cause a severe negative impact in some of the most important aspects of development: the function of the brain, the sound or speech mechanisms, the lungs, heart, guts, and nerves, among others. Because it is so utterly vital, it is even more highly conserved than mtDNA.

Recall that in the 16,569 base pairs found in the mtDNA genome of normal humans, as many as 120 variations can be found in the first of us, southern Africans. That percentage of difference is quite small, only 0.7%. Compare that with the FOXP2 gene, which in normal humans is 2,594 base pairs long, and contains no variations. 0%! None! Nada! Every normal human has the exact same array of FOXP2 base pairs as every other normal human.

This is not to say mutations never occur in FOXP2. They can and do, and a number of them have been found. However, every mutation is debilitating in some way, and because FOXP2 is vitally important to so many bodily functions, most mutations in it will cause termination of life. When termination does not occur, the mutation's impact on its host is usually severe.

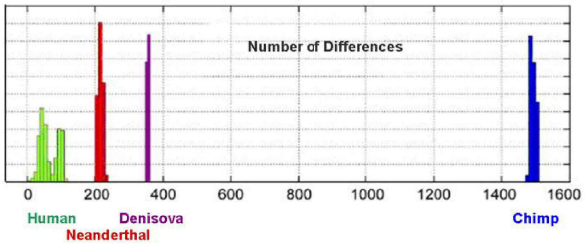
Profile of Human (HF) and Starchild Skulls





Same parts; frontal, sphenoid, temporal, parietal. Note HF concussion rear middle of parietal. HF cradle-boarded in infancy; occipital (rear of head) is flat as board it was strapped to. SC has normal convolutions across occipital; not cradle-boarded or bound in any way. HF has 1200 cc brain. SC has 1600 cc's angled steeply down onto a cerebellum base 1/4 to 1/3 normal size. Reduced cerebellum (lower brain) has greatly reduced internal struts (transverse ridges) to support a much greater volume of cerebrum (upper brain). SC inner ears roughly 50% larger than normal.

Both Neanderthal and Denisova have mtDNA more varied than human mtDNA, but they still contain many long unvarying segments. Neanderthals differ from the human CRS by 200 ± base pairs. The Denisova differ from it by 385 ± base pairs, which is why they are designated as separate from humans and Neanderthals. As a comparison, chimp mtDNA differs from the human CRS by 1,500 ± base pairs, as seen in the following graph.



MtDNA is so highly conserved because nature applies a very strong selective pressure against changes in its most critical regions. When changes do occur in such places, it can lead to disruption of a crucial activity, which can lead to dysfunction and death. As a result, an unfavorable mutation is not passed along. However, mutations that do not change proteins, and those in regions that do not encode proteins, can and do slowly accumulate.

	4590	4590	4600	4610	4620
Human mtDNA CRS	4584	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT A	4583	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT C	4579	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT H1	4584	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT H2	4585	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT I	4584	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT J2	4583	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT J1b	4584	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT K	4587	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT L1a	4582	GCCTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT L1b	4582	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT L1c	4581	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT L2	4583	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT L3b	4582	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT L3d	4582	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT M*1	4584	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT M11	4586	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT M12	4586	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT M*2	4582	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT
HPT N1b	4582	GCTTTTATTCCAGTTCTAACCAAAAAAATAAACCCT

This explains why only 0.0072% (120th of 16,569 bp) of human mitochondrial DNA has any variation across its 33 haplogroups. Below is an example of variation in human mtDNA. The haplogroup L1a has a C (cytidine) nucleotide, while at the same location all the other haplogroups have a T (thymidine) nucleotide. (The program's output highlights all variations to aid researchers.)

Each variation like the one above is called a Single Nucleotide Polymorphism (SNP), and for human mtDNA such "snips" are catalogued in databases maintained by the National Institutes of Health. The fewer substitutions a DNA segment has, the more conserved it is. Human mtDNA, with only 120 ± variations in 16,569 base pairs, is considered very highly conserved.

Notice that the first haplogroup in the chart below the Control Reference Sequence (CRS) is haplogroup A (HPT A). This is the haplogroup that was matched to the human female skull found with the Starchild Skull. The next down is haplogroup C (HPT C), matched to the Starchild with small fragments of its mtDNA in 2003.

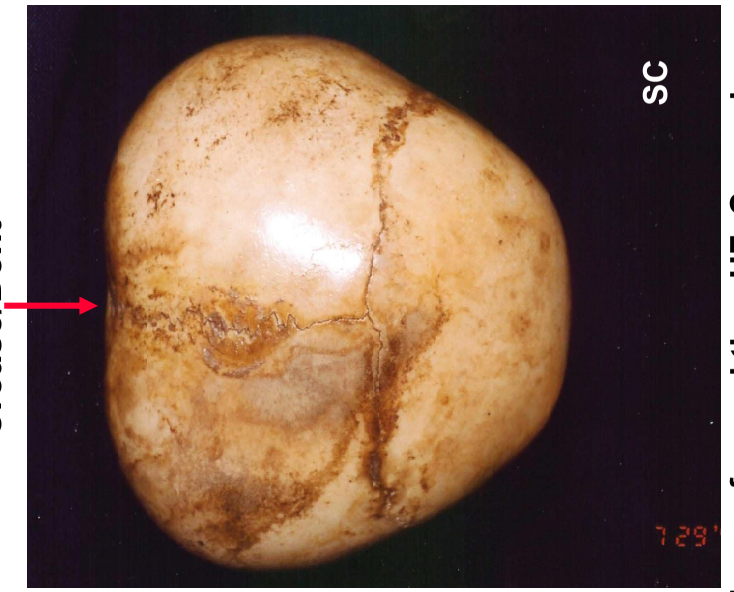
When Trace Genetics detected the Starchild's mtDNA, they used human-specific primers that amplified segments only a few dozen nucleotides long. These segments were targeted for diagnostic analysis because they contained human haplogroup-specific changes that could determine whether mtDNA belonged (or not) to a specific haplogroup.

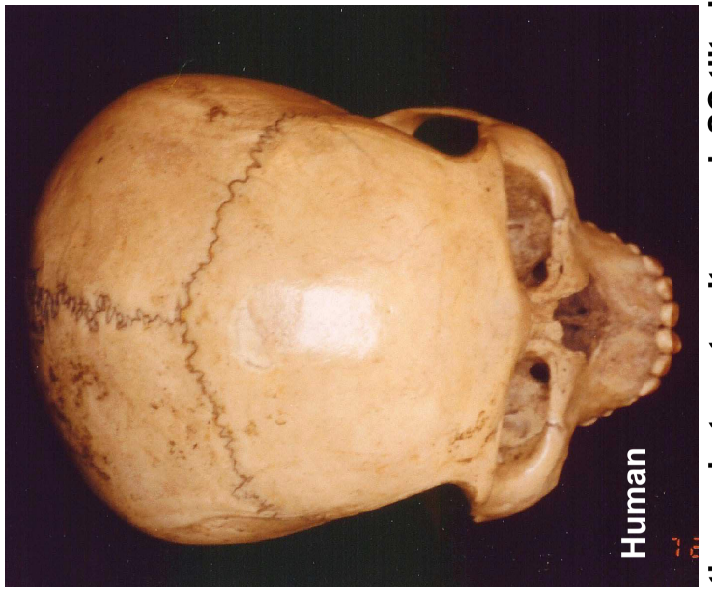
If the targeted segments also happened to be a part of a highly conservative sequence of human mtDNA that has a crucial biological function, the segments could be similar even among very different species (i.e., humans and chimps), leading to confusing conclusions.

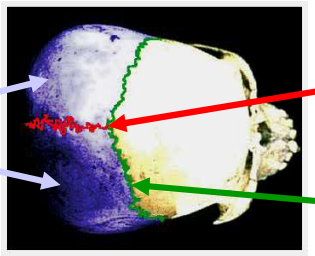
In early 2011, our geneticist analyzed four newly sequenced fragments from the Starchild Skull's mtDNA samples. A computer program similar to the BLAST program mentioned earlier matched the four Starchild fragments to catalogued fragments of human mtDNA.

One fragment matched a segment in the chart shown earlier, seen expanded below. This is a highly conserved segment of human mtDNA, with only 1 nucleotide variation among 33 human haplogroups present (L1b). There is also one in Neanderthal and one in Denisova .

Top View of Human and SC







Tilt angles in these shots not quite equal; SC tilted more forward than HF. Coronal sutures on view. All sutures of both skulls healthy; no premature fusing. Stains on SC due to soil it was buried in. Shine on both due to an application of shellac for preservation at some point after discovery. Again note difference in crowns. SC has a "crease" of highly uniform depth and breadth across entire rear of upper crown, ruling out upward pressure from hydrocephaly (water on brain).

The largest composite fragment that could not be matched in the database was several thousand nucleotides long! However, until some biological sense can be extracted from these non-matching nuDNA fragments, it's too early to draw any definitive conclusions.

So, how can "biological sense" be extracted from them? One way would be if such DNA fragments are found to represent the coding part of a gene. That would mean it could be translated into a protein, and attempts could be made to predict the function of the protein.

Such a coding fragment is yet to be found among the recovered samples of the Starchild DNA because, as it happens, only about 3% of the total human genome is coding sections. Therefore, it is extremely unlikely that random sampling will miraculously discover a coding section, and all of the Starchild fragments have been obtained randomly.

The Starchild Project's team considered this development a vital step forward in the quest to establish the truth about the Skull's genetic heritage. However, skeptics and would-be debunkers soon pointed out that the submission parameters of a BLAST search *could be* manipulated by an unscrupulous researcher adjusting them to gain a favored result.

When those trying to discredit the Starchild Project suggest its results have been faked or fudged, they fail to acknowledge that all Project members have put their professional and personal reputations at stake. Project members have by far the most to lose from invalid results—much less faked results—so each of them works hard to ensure that appropriate steps are taken to secure accurate, repeatable results at every point in the process.

To serve that policy, the nuclear DNA results so far obtained have undergone sequential verification, but it must be stressed that they are now, and will remain, only fragmentary, and they will ultimately require subsequent repetitions for absolute confirmation. This will be completed by our geneticist and his colleagues as time and funding permit.

2003 vs 2011 Mitochondrial DNA Testing:

Early in 2011, the geneticist sequenced some fragments from the Starchild Skull DNA sample that, when examined by a program similar to BLAST, revealed they were segments of mitochondrial DNA rather than nuclear DNA. This was an intriguing development.

Up to that point, he had accepted the Trace Genetics result of 2003 (that the Starchild's mtDNA was entirely human) as accurate. However, the primer series utilized in 2003 recovered only relatively small and quite specific segments of human mtDNA. The situation at that time left room for error and therefore should be clearly understood.

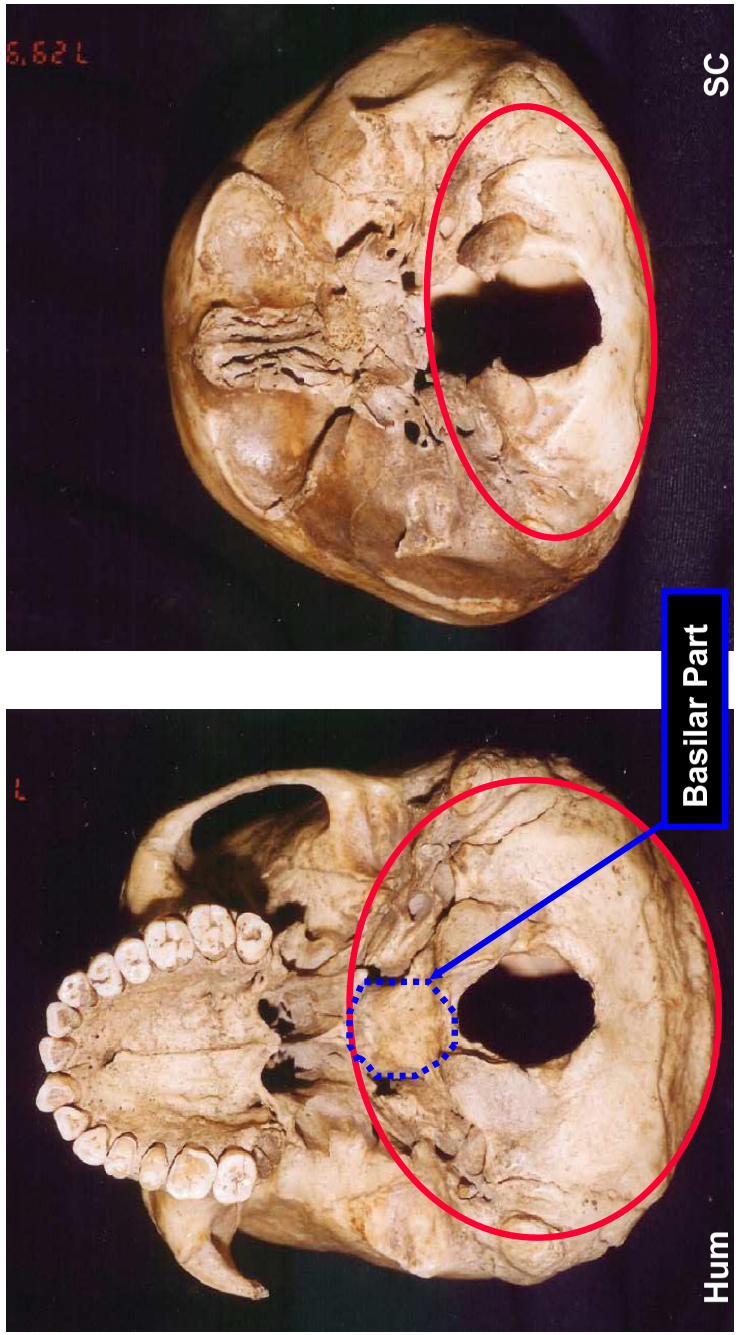
When the primers employed in 2003 found corresponding fragments on the Starchild's mtDNA, the primers rendered a positive signal from the PCR indicating "this particular part of the mtDNA is human, or highly human-like." However, that did not mean other untouched sections of the mtDNA would not vary considerably from the human mtDNA. And this, apparently, is what happened—the 2003 sampling proved to be too small.

2011 DNA Testing & Results:

Mitochondrial DNA is quite distinct from nuclear DNA. While both mtDNA and nuDNA exist as double-strand molecules forming the famous "double helix," nuDNA is segregated into 46 chromosomes (in humans). Due to the massive amount of DNA in chromosomes (each consisting of millions of base pairs), DNA is tightly packed into multiple folds and is encased in a shell by large amounts of proteins called histones.

In contrast, mtDNA forms a tiny circle consisting of 16,569 base pairs. Despite its small size, its function is crucial to life. Unlike nuDNA, the vast majority of it works, so mutations seldom become permanent. In fact, in the entire course of human existence, mtDNA has accumulated only 120 ± variations across the entire population. Compare that to nuDNA, whose 3 + billion base pairs have as much as 15 million variations.

Neck Sizes of Human and SC



Basilar Part in front of foramen magnum (neck hole) is normally fused by age 25. Absence in SC indicates less than 25 at death, though it could have snapped off at some point. Note great reduction of SC's lower face connection points (condyles, mastoids, mandibular fossa, zygomatic bases). If SC is adult, lower face less than 1/2 normal. Note bone plates where neck muscles attach—HF surface area is at least twice SC's. Note HF cheekbone (zygomatic arch)—allows two average male fingers to easily fit under; two soda straws would fit under SC's if it were present. Note HF maxilla (teeth and roof of mouth). Part of SC maxilla will be seen later.

analysis, even though its burial for 900 years meant that as much as 90% of the DNA recovered from its bone would come from contaminating bacteria.

Nonetheless, as demonstrated by the Neanderthal genome project, even very extensive contamination can be identified and eliminated from data sets by modern bioinformatics. Specialized computer tools enable various degrees of filtering, one of which removes all bacterial sequences to isolate only information pertaining to the Starchild Skull's nuDNA. That means its entire genome derived from the genetic package provided to it by both parents—its human mother and its potentially non-human father.

Although access to advanced DNA recovery technology was rapidly expanding, the price for recovering and sequencing ancient DNA remained well beyond the Starchild Project's meager financial resources. Then, in early 2010, that tide of frustration suddenly turned.

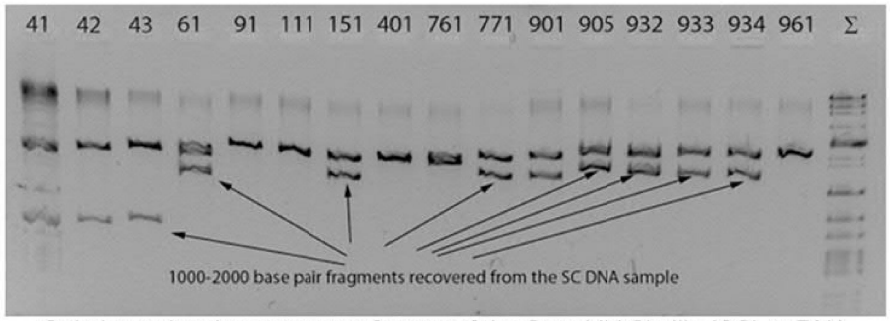
2010 DNA Testing & Results:

A geneticist from an established and well-accredited research facility in the U.S.A. offered to attempt to analyze the Starchild Skull's nuclear DNA using sophisticated genetic analysis techniques such as genome amplifications and classic shotgun sequencing, which were not available to Dr. Malhi and Dr. Eshleman due to the narrow specialization and commercial nature of the Trace Genetics business model.

As with any DNA analysis that involves enzymatic amplification, the techniques used by the new geneticist still relied on primers, but he used different approaches that were not narrowly connected to the origin of the DNA samples, and were not species-specific.

It was very labor-intensive work, and thus not cost effective for a full genome recovery. However, the geneticist's goal was to find a few fragments of the Starchild's "missing" nuclear DNA, which would clearly demonstrate that the entire genome was recoverable and therefore an investment in 454 sequencing would be warranted.

In February 2010, the geneticist was provided with a bone sample from the Starchild Skull. In March, he had recovered dozens of fragments of DNA from the sample, much of which resulted from the inevitable bacterial contamination. Nonetheless, others were clearly fragments of the Starchild Skull's nuclear DNA, so after 11 years of effort—*success*!

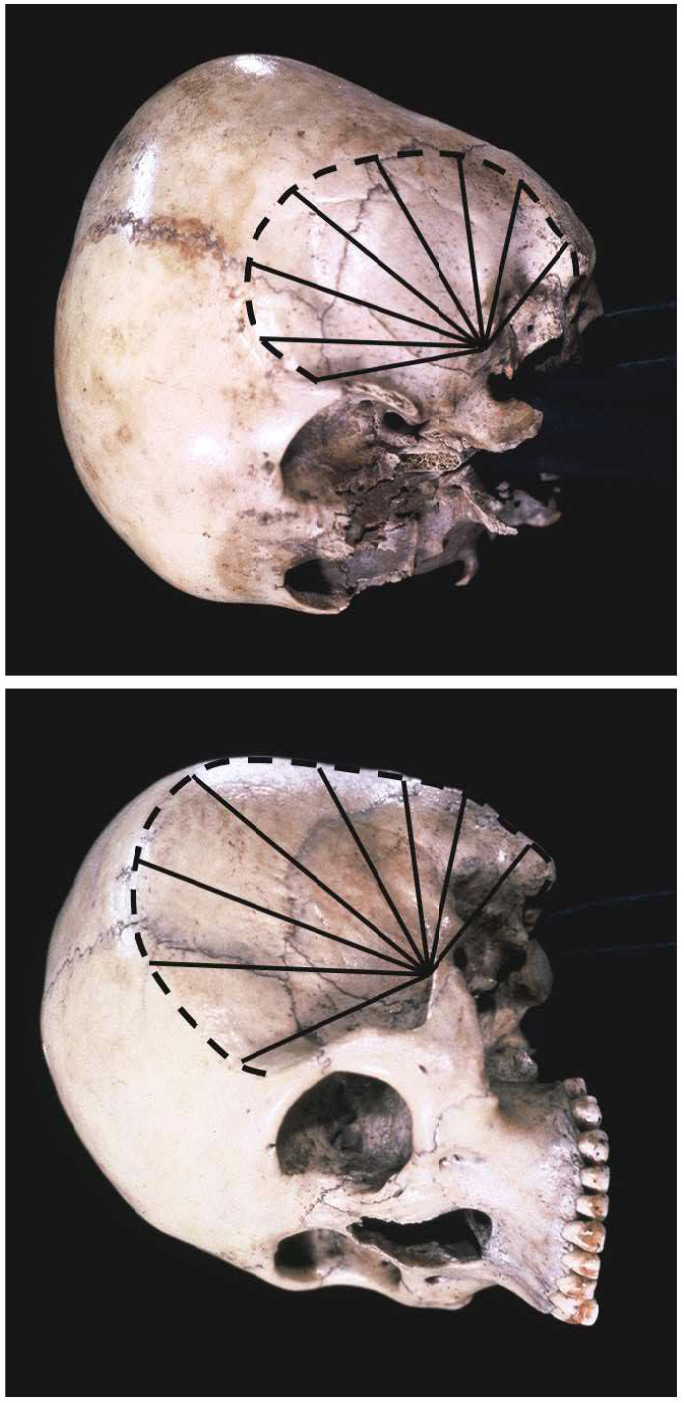


Gel sheet showing recovery of some of the Starchild Skull's (SC) nuDNA

All of the recovered fragments were completely characterized using the classic Sanger sequencing technique, and analyzed by capillary electrophoresis (also known as automated sequencing). These are standard DNA sequencing techniques. After obtaining sequencing data, the geneticist compared the new sequences to millions of sequences recovered by other researchers from all over the world, looking for a match.

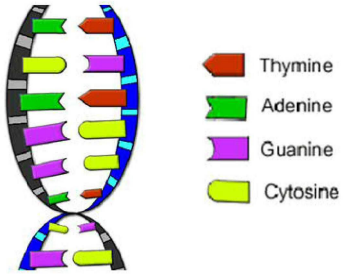
Those worldwide results have been deposited into a massive database maintained by the National Institutes of Health (NIH) in Washington, D.C. That database was created by NIH scientists from genomes and partial genomes of thousands of plant and animal species—from sponges to humans—that have been recovered with the help of NIH funding.

Area of Chewing Muscles



Chewing muscles leave imprints on the sides of skulls that reveal where they were attached In life. Notice SC's chewing muscles are roughly half normal size on both sides of skull. The mandibular fossa—the dents in the skull where the mandible (lower jaw) fits—indicate a very narrow lower face, also in the range of half normal size. If such extensive reduction of muscle mass were to have been the result of a natural deformity, how would its genes know to also halve the size of the jaw?

other methods. The principal drawback of using the PCR technique was its dependence on employing correctly designed *primers* for its amplification.



To design primers correctly, the target DNA sequence had to be known from the start, or at least the relatedness of known DNA to unknown DNA had to be understood, such as that between chimp DNA and human DNA (97% related). This made using PCR for unknown DNA sequences (those not catalogued) extremely problematic, if not impossible.

Primers are designed strings of nucleotides similar to those in DNA, but much shorter, often only 25 to 30 nucleotides long. Unlike DNA, which is double-stranded, primers are single-stranded. When added to a sample of DNA being tested, a primer is designed to find its complimentary strand and bind to it at a specific *locus* (point of contact).

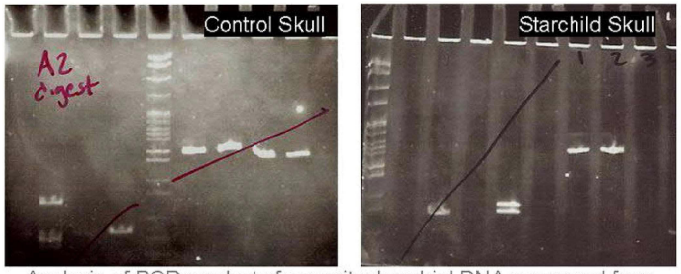
To create primers that accurately reproduce the *sequence* of nucleotides (their order of connection) at a specific locus requires knowing the exact sequence at the target locus. Imagine a human-specific primer is the string of nucleotides shown in grey (below left). When such a primer is added to a DNA sample, it will seek to connect with its other half (shown in blue) in the mirrored fashion mentioned above.

When a primer locates its counterpart (a complementary sequence, or complement), the PCR process is able to proceed and a positive result will register by whatever measurement an investigator chooses to utilize. Thus, with primers designed to conform to human DNA, a positive registration of a PCR result indicates that human DNA is present in the sample. Conversely, if the primers cannot find their complements, no human DNA is present.

2003 DNA Testing:

To test the DNA of the Starchild Skull and the control skull, Dr. Eshleman and Dr. Malhi used the PCR technique with primers designed on the basis of known human sequences.

On the first attempt with the control skull, both mtDNA and nuDNA were detected, revealing it was a female whose mtDNA belonged to haplogroup A. The Starchild's mtDNA was also recovered on the first attempt, but it belonged to haplogroup C. Haplogroups are how geneticists classify macro groups of people with similar yet slightly different mtDNA. The exact number of haplogroups differs depending on which reference is consulted, but 33 groups are commonly used for genetic comparisons.

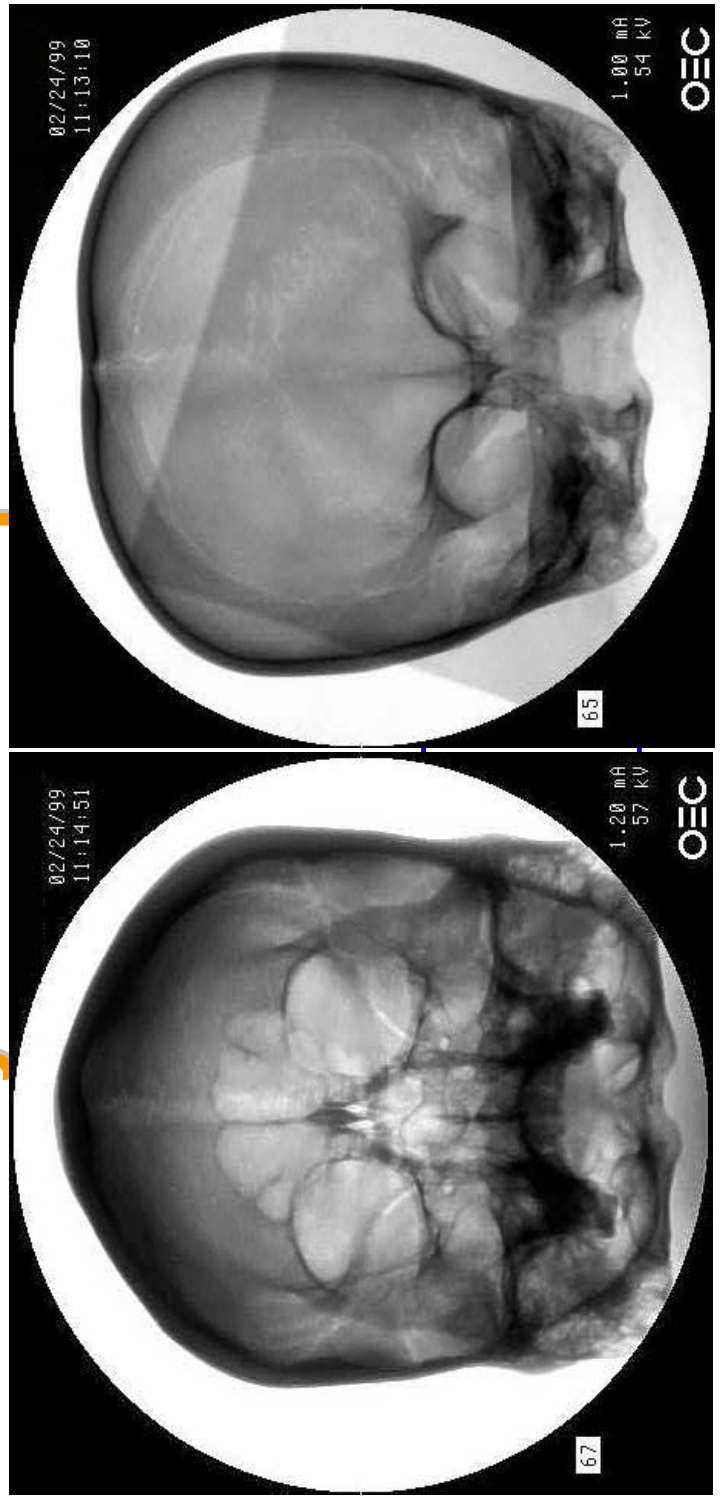


Analysis of PCR products from mitochondrial DNA recovered from Human Female (left) and Starchild Skull (right) by gel electrophoresis.

This result indicated that the female and the Starchild could not be maternally related because their mtDNA did not belong to the same haplogroup. (Remember, everyone inherits only their mother's mtDNA, their grandmother's, etc.)

Recovering mtDNA so easily from both samples meant they were well preserved during 900 years in a dry mine tunnel. The fact that the Starchild's mtDNA apparently belonged to a normal human haplogroup indicated that its maternal line was entirely human.

X-Ray Sinus Comparison



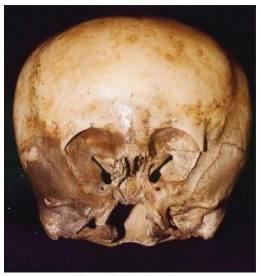
HF frontal sinuses behind eye sockets, look like cauliflower. No trace of frontal sinuses in SC, not even vestiges or nubs. Highly unusual. Note "afterimage" of brain-within-brain in SC. Too symmetrical to be water atop brain. No idea what it means. Also note in SC eye sockets the round shape, lower placement, and odd upsweep at upper outside corners. No idea what this means, either, but different enough from HF to be worth noting. Actually, differences here are numerous.

STARCHILD SKULL DNA ANALYSIS REPORT—2011

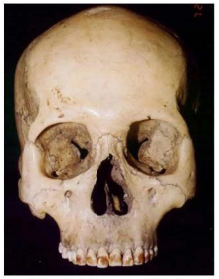
Early in 2011, a geneticist attempting to recover Starchild Skull DNA identified four fragments that matched with human mitochondrial DNA (mtDNA). Comparing those fragments with matching fragments from human mtDNA produced an astonishing result. In every comparison, the Starchild presented many more nucleotide differences than are normally found among humans. In one comparison detailed in this report, the compared segments of human mtDNA came from one of its most highly conserved regions. Across 167 nucleotides in this segment, only 1 single variation is found among the 33 human haplogroups. In contrast, the same length of Starchild mtDNA has 17 differences! Of those 17, a significant number should be confirmed by multiple repetitions of the test. If several are confirmed (which is highly likely), it will be enough evidence to establish a new earthly species. [In 2010 just such a new prehuman species, Denisova, was confirmed by having a significant number of differences in its mtDNA. This will be explained later in this report.]

Introduction To The Starchild Skull:

The Starchild Skull is a 900-year-old human-like bone skull with distinctly non-human characteristics. It was unearthed in a mine tunnel near Mexico's Copper Canyon around 1930. The Starchild Project is an informal research group that has coordinated numerous scientific investigations since its founding in February of 1999.



Starchild Skull

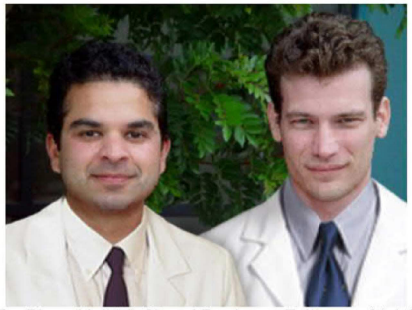


Normal Human Skull

By 2003, the Starchild Project had completed enough research to strongly suspect the Starchild was something never seen before by science. At minimum, it presented a level of deformity and function previously thought impossible, and perhaps something much more significant: a new type of human-like being living on Earth 900 years ago.

Formal research was carried out by credentialed experts in the USA, Canada, and UK. It included cranial analysis, dental analysis, X-ray analysis, CT scan analysis, radiocarbon dating (C-14), microscopic analysis of multiple bone preparations, scanning electron microscopy (SEM), bone composition analysis, statistical analysis, inorganic chemistry analysis, DNA analysis, and other investigations into possible natural explanations such as genetic defects, birth defects, and skull deformation resulting from cultural practices. *(Complete details of these studies can be found in the book "The Starchild Skull" by Lloyd Pye)*

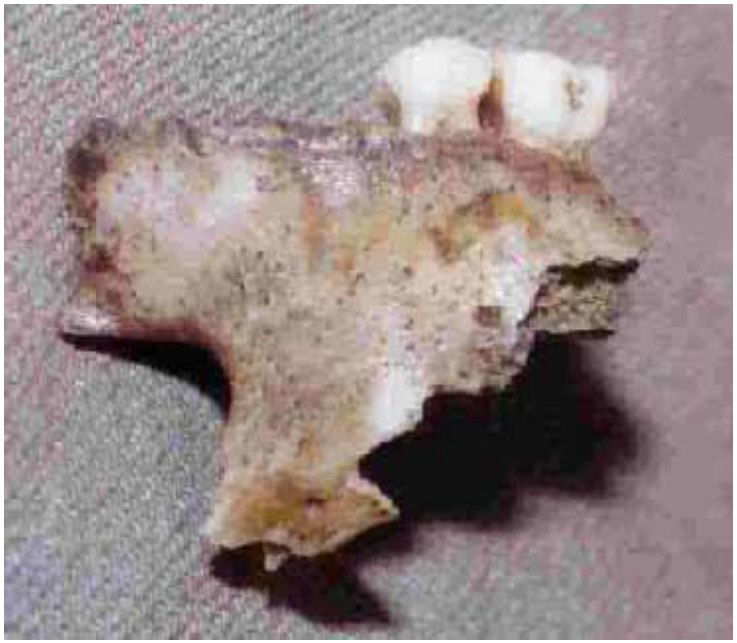
The collective conclusions were that the combination of skull features were unique and could not be explained by any known deformity or combination of deformities, mutation, cultural practices, genetic disorders, or illness. If a human were born today with physical abnormalities like the Starchild, it could not survive. Yet something about the essential nature of this being permitted it to do what would be impossible for a normal human.



Dr. Ripan Malhi (left) and Dr. Jason Eshleman (right)

Realizing the ultimate answer could come only from genetic testing, in 2003 the Starchild Project commissioned a DNA analysis of the Starchild Skull's bone by Trace Genetics of Davis, California. *(Trace Genetics was acquired by DNA Print Genomics in 2005.)* Its owners and principal geneticists were Dr. Ripan Malhi and Dr. Jason Eshleman, specialists in the recovery of ancient DNA, meaning DNA from samples more than 50

Rt. Maxilla—2 Deciduous Molars



Maxilla piece recovered with SC skull. In left image, smooth curve from top middle to left center is nasal passage; thus, SC had nose opening (if not a nose) similar to humans. Unlike the missing frontal sinuses, maxillary sinuses are present. Above two teeth that are visible, and also visible at the tops of the three extraction holes, other teeth are impacted into bone, suggesting child's teeth. Arrangement of teeth also suggests first dentition. Larger tooth is now gone, sacrificed to first DNA test, but small one remains in situ and is seen in extreme close-up in next slide.

All of these deformities and many others have been investigated as possible explanations for the Starchild Skull, and none of them match the attributes of the skull (The Starchild Project, 2010b).

Cradleboarding and all other artificial deformation techniques leave evidence on the surface of the skull bone, and no such evidence is present on the surface of the Starchild Skull. Thus, Dr. Robinson (2004) concluded that "the extreme flattening of the skull was caused by its natural growth pattern and is not artificial."

Hydrocephaly (also called "congenital hydrocephalus") is a condition where excess cerebrospinal fluid in the cranium causes internal pressure that pushes outward against the skull, expanding any unfused sutures to give the skull an "inflated" shape (MedicineNet, 2010). According to Dr. Bachynsky and Dr. Robinson (cited in Robinson, 2004) the sutures in the Starchild Skull were unfused and healthy at the time of death, with ***no*** expansion present at the suture lines. Thus, the Starchild's unusual shape could not have been caused by internal pressure or the sutures would be expanded. Dr. Bachynsky specifically ruled out hydrocephaly in his examination of the skull (Robinson, 2004).

Brachycephaly simply means a skull that is abnormally wide, and is a possible symptom of multiple illnesses, deformities, and disorders. Therefore, it isn't any kind of explanation for morphology; it is only an observation of a physical trait (Kelly, 2010).

Crouzon Syndrome is a condition where symptoms include the complete premature fusion (obliteration) of two or more cranial sutures (Matusiak & Szybejko-Machaj, 2010). In 2003 Dr. Bachynsky, a radiological expert, concluded unequivocally that there was no abnormal or premature fusion of any of the Starchild Skull's sutures (as cited in Robinson, 2004). Therefore, Crouzon Syndrome is impossible as an explanation.

Progeria (also called Hutchinson-Gilford Progeria Syndrome) is a fatal condition that causes the appearance of premature aging in children (Progeria Research Foundation, 2010). In Progeria, bones can become thinner and weaker, and premature fusion of sutures can cause abnormal skull shape, which in turn gives the lower face and eyes an unusual appearance (Medline Plus, 2010). One of the primary symptoms of Progeria is open fontanelles on the top of the head, the "soft spot" on a baby's head (UM Medical, 2010). This condition is not present in the Starchild Skull (Robinson, 2003).

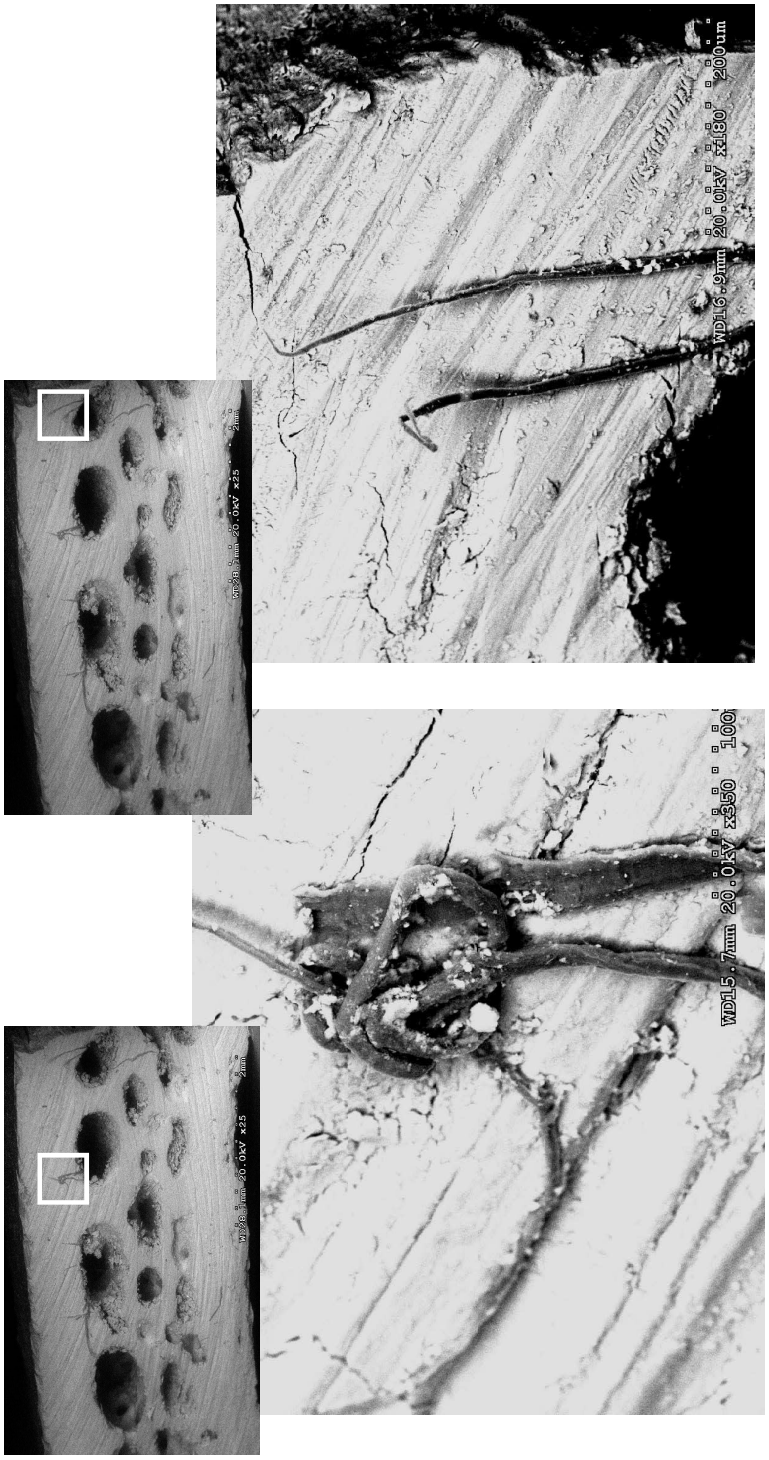
The Starchild Skull's bone ***is*** thinner than normal, but instead of being more brittle, as is caused by Progeria, it is observed to be much stronger than normal human bone (Pye, L. 2007, p. 176). Progeria does not remove the inion, change the location of the optic foramens, change the shape of the hardest sections of bone while leaving the weak sutures untouched, or increase the collagen content of bone (UM Medical, 2010), all features of the Starchild Skull (Pye 2010b). The only symptom that Progeria has in common with the Starchild Skull is "micrognathia," an abnormally small jaw (UM Medical, 2010), leaving all of the other unusual features of the Starchild unexplained, and making Progeria a thoroughly incorrect diagnosis.

> *Proponents of a paranormal explanation for the skull's origin reject plausible scientific hypotheses involving non-paranormal causes.*

This is flatly untrue. We consistently and continuously search for any provable explanation for the Starchild Skull, and we do so with complete disregard of whether the cause is "normal" or "paranormal." Many mainstream scientists dismiss the work of the Starchild Project as "unscientific" because we allow for the possibility that the skull may be a human-alien hybrid. To those people we say, "Check your history books."

Most of what is known as "science" today started as a theory that was then proven, or has not yet been disproven and so is treated as fact by those whose interests are served by the assumption. These unproved but near universally accepted theories include cosmology's Big Bang, biology's evolution-by-mutation, and much of the work of Pythagoras, Einstein, and Stephen Hawking.

Fibres: "Knot" and "Threads"



Knot: At first glance, characteristic of capillaries (too small for veins). Closer analysis does not bear this out. Until tests are completed, we will not know if it is organic or inorganic. We have no idea how it could have been tied into a knot under the pressure of bone cutting, much less how it survived the process. Everyone who has seen it is baffled. Serious explanations are welcomed.

Threads: Found near the knot, yet completely different in size, shape, and apparent texture. More like threads or hairs than capillaries tied into a knot. Here, too, we have no idea what to say until tests reveal biochemical makeup.

> *It (the Starchild Skull) is primarily notable due to claims by paranormal researchers that it is evidence of extraterrestrial contact.*

Merriam-Webster defines paranormal as “not scientifically explainable” (2010). Thus, the word “paranormal” does not apply to the Starchild Skull because two dozen Ph.D.s in various branches of science have provided written analysis of their opinions about it. In addition, several other Ph.D.s have given opinions they will not sign for fear of retaliation by vindictive peers who “police” the rigid status-quo belief system of mainstream science. Using those signed and unsigned data and opinions, Lloyd Pye has crafted two books filled with scientifically supported arguments. The printed book **The Starchild Skull** (2007), and the eBook **Starchild Skull Essentials** (2010).

As of this writing, ongoing research has provided proof that the Starchild Skull possesses physical characteristics (Robinson et al. 2004), biochemical attributes (Pye, K. 2005), fibers and residue inside the bone (Pye, L. 2007), and DNA that have never before been found on Earth (The Starchild Project, 2010). We propose that this array of facts counts as valid evidence supporting the theory that the skull is at least partially of extraterrestrial origin.

> *Mitochondrial DNA recovered from the skull establishes it as human.*[1]

Although Trace Genetics did recover human mitochondrial DNA from the Starchild Skull in 2003, this statement is inaccurate because it is possible to have the mitochondrial DNA (passed down through mothers) of one species and the nuclear DNA (passed down through both parents) of another species (Perdy, 2003). Therefore, human mitochondrial DNA alone does not establish the human species (Meadows, 2010). Examples of this phenomenon include the zebra/donkey hybrid “Zedonk” (BBC, 2010), the lion/tiger hybrid “Liger” (CBS, 2010), and the horse/donkey hybrid “Mule” (Perdy, 2003).

In 2003, Trace Genetics determined that nuclear DNA was impossible to recover using techniques developed up to that point in time. Therefore, it was impossible for them to establish if the Starchild Skull was entirely human or not. The citation here is the same outdated Novella article from 1999 (and its equally outdated 2006 reprint). Specifically, he references quotes from Lloyd Pye and Mark Bean regarding mitochondrial DNA, yet Mark Bean ceased working with the Starchild Project in 2000, and mitochondrial DNA was not recovered from the Starchild Skull until 2003, proving that this quote is inaccurate.

> *According to Pye, the skull was found around 1930 in a mine tunnel about 100 miles (160 km) southwest of Chihuahua, Mexico, buried alongside a normal human skeleton that was exposed and lying supine on the surface of the tunnel.*[4]

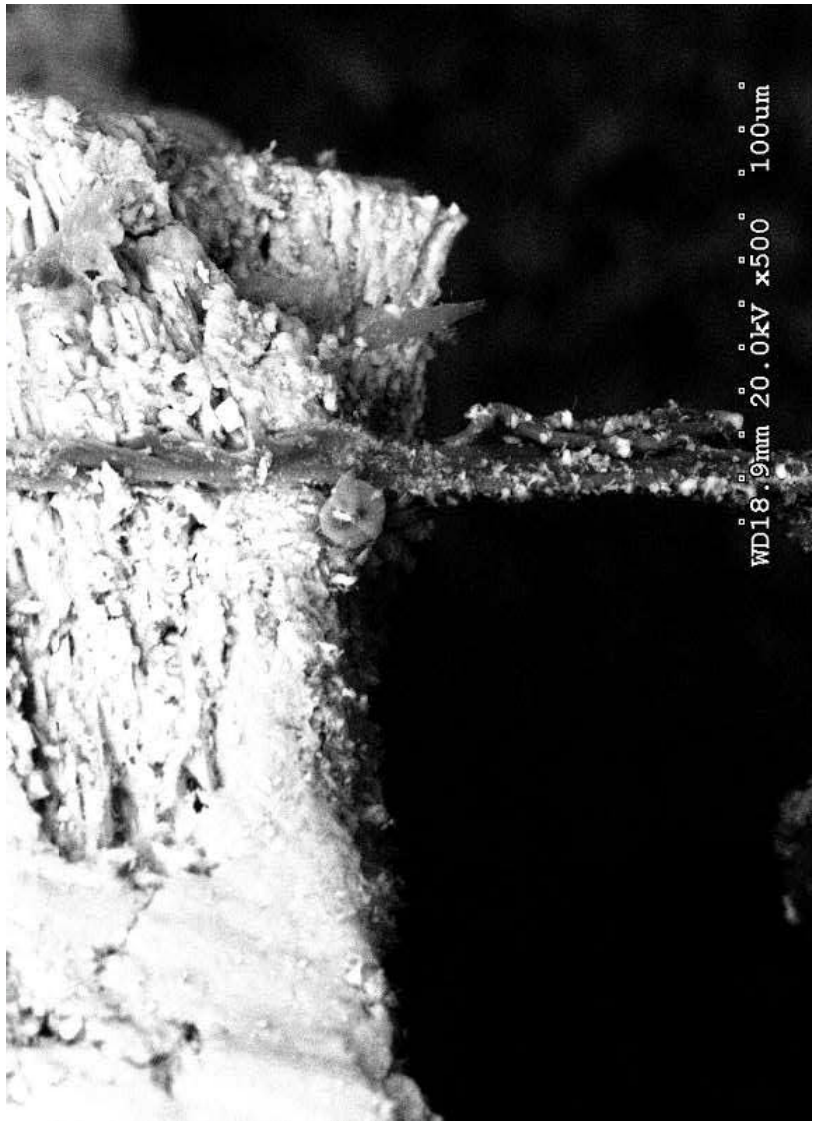
This references an article from 1999, when the report of how the skull was found had no scientific evidence to support it. Since then, analysis of the staining on the skulls (Pye, L. 2007, p. 21) and inorganic chemistry (Pye, K. 2005) have combined with the synchronistic Carbon-14 dates (Pye, L. 2007, pp. 206-7 and p. 218) to indicate that the provenance story is very likely true.

> ***Analysis***
>
> *The skull is abnormal in several respects.*

This is a considerable understatement. Dr. Kaburda concluded that the skull presents 10 standard deviations from the norm (as cited in Robinson, 2004), is comprised of bone uniformly half as thick and weighing half as much as normal human bone (Robinson 2004), but is significantly more durable (Pye, L. 2007, pp. 171-172). [Note: A comprehensive list of physical and biochemical abnormalities in the Starchild Skull is available HERE.]

> *A dentist determined, based on examination of the upper right maxilla found with the skull, that it was a child's skull, 4.5 to 5 years in age.*[5]

Fibres – 4 - Above “Claw”



“Button” is now near center. We think button is remnant of another kind of fiber, or the snapped-back base of one like the one on view. We can’t tell. Notice a piece extending opposite button, on other side of fiber.

characteristics. At their bases where they connect to the skull, they fuse at a much tighter angle than humans exhibit.

17. Where the Starchild's zygomatic arches attach to the eye sockets, rather than folding into the socket itself, as do human zygomatic arches, they break off clean and with a distinct edge. This is a major difference from humans.

18. The chewing muscles that extend up through and under the Starchild's zygomatic arches fan out to cover an area roughly half the area that normal human chewing muscles cover. This, too, is a significant difference.

19. The Starchild's foramen magnum (the hole where its spine entered its cranium) is located about 1.5 inches farther forward than where it would be placed in a normal human. This is far beyond the range of normal variation.

20. The Starchild Skull's ear holes are positioned significantly lower and farther forward than normal human ear holes. This is due in part to being pushed out of position by the extreme flattening of the rear of the head.

21. X-rays have revealed that the Starchild's inner ears are approximately twice the size of normal human inner ears. We have no idea why this would be the case. Perhaps it required a better balance mechanism that we need.

22. The Starchild's neck muscles attach in a way that indicates it was a very small neck relative to typical humans, no more than half of normal size. And it is positioned directly under the center of balance of the skull, which is very different from the way a normal human skull rests on its neck.

23. Human neck muscles normally attach at an elevated point in the rear center of the occipital bone. That elevated point is called the "external occipital protuberance," or "inion" for short. All humans, and indeed all primates on Earth, have an inion. The Starchild Skull does not have one.

24. The external occipital protuberance has a corollary inside the skull, called, not surprisingly, the "internal occipital protuberance." Inside the Starchild Skull is a version of this that is greatly reduced from normal.

25. Though the rear of the Starchild Skull is widely expanded and greatly flattened, this is not the result of deliberate binding or cradleboarding. It has all of its natural convolutions, which means it grew the way it looks because its genes directed it to grow that way. This seems to be the case with every one of its many variations from normal.

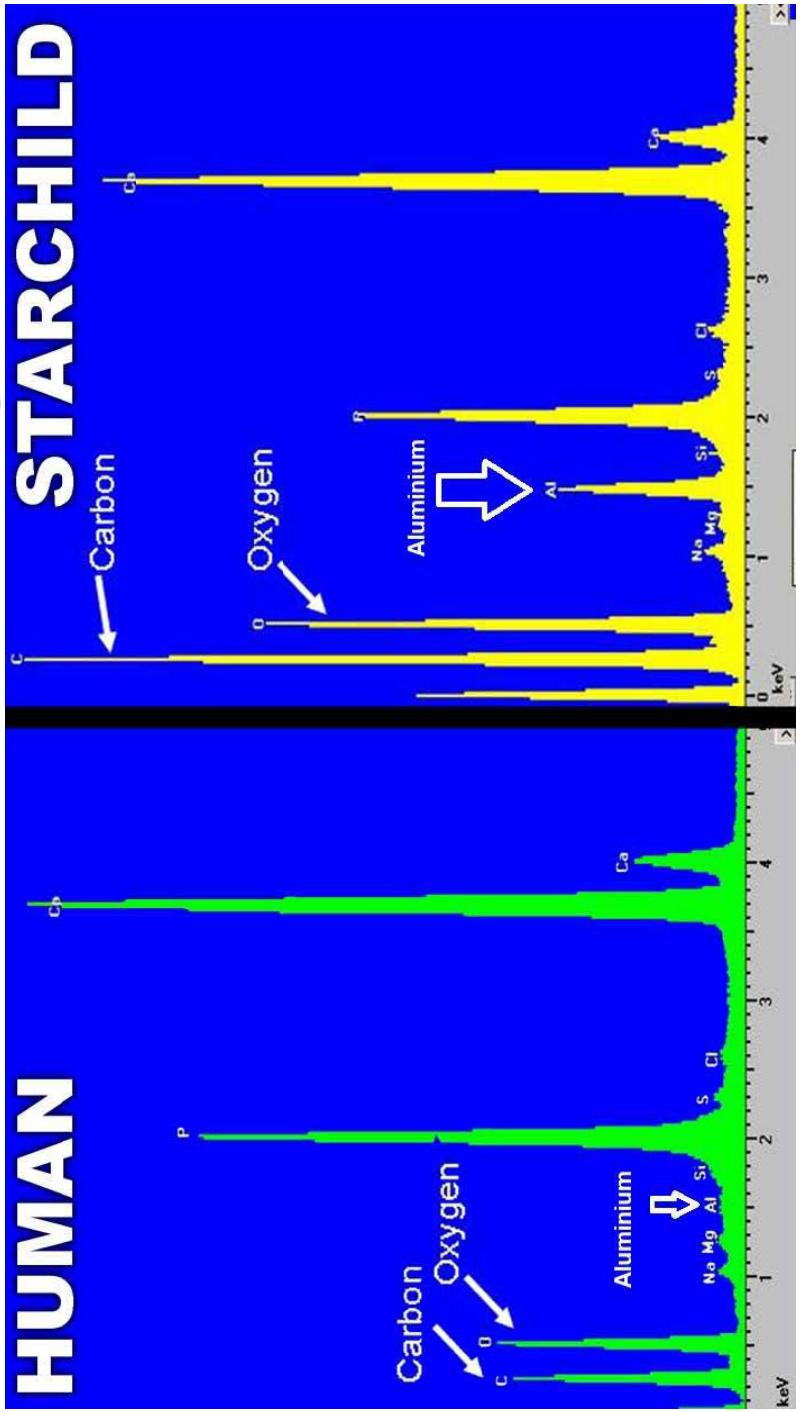
26. At the top of the rear of the Starchild's head is a noticeable "crease" at the rear of its saggital suture, where it meets the lambdoidal suture. The only possible explanation for such a configuration in a human would be a fusion of the suture. A CAT-scan shows this was not the case with the Starchild.

27. The Starchild Skull's physical size is of a small adult in the range of 5 feet tall, or an average 12-year-old. Surprisingly, its brain capacity is much larger than a skull that size should contain. A 12-year-old has about 1200 cubic centimeters of brain. An average adult has 1400 c.c. of brain. The Starchild has a whopping 1600 c.c.! We don't know where it all goes.

28. The Starchild's expanded parietal bones and the steep angle of the rear of its head strongly indicates that its overly large brain should have pressed its way out of the foramen magnum hole. Yet that didn't happen, so it seems the Starchild has a brain made of material stronger than normal human brain.

Note: Explanations and terminology in this report are aimed at non-experts. Those with expert knowledge in genetics will naturally find its concepts and descriptions simplified. The identity of certain research team members requires temporary anonymity. Their names will be revealed when they are ready to formally release reports for peer scrutiny.

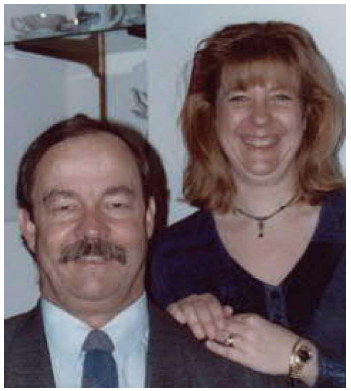
Bone Chemistry



This elevated aluminum spike came in the first S.E.M. analysis of the SC bone. Aluminum is poisonous to humans in these quantities, so we assume it arrived by contamination. However, we can't think of a viable way for a skull buried in a mine tunnel to be contaminated by aluminum without water as a dissolving medium.

PROVENANCE (HISTORY)

The person who first recovered the Starchild Skull passed away in the 1990s, making the story of its discovery in situ hearsay. She never pinpointed the exact location where she found the skulls, and claimed that the other bones were washed away in a flash flood, making finding the burial place, or recovery of any other bones, unlikely. However, the staining on the skulls matches the story that Ray and Melanie were told, as does the silicate encrustation on the skulls. But whether the story is true or not, the fact remains that the Starchild Skull is real, and unlike anything previously found on Earth.

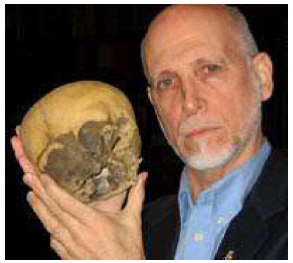


Ray and Melanie Young, skull owners

The known history of the Starchild Skull begins in the 1930s, when an American teenage girl was on vacation with her family near Mexico's Copper Canyon region. She went exploring alone and found a long-abandoned mine tunnel. Inside it she found a full human skeleton lying on its back. Beside it was a grave-like mound of dirt with an arm bone sticking out of the dirt and the hand bones wrapped around the upper arm bone of the skeleton lying on the surface. Using her hands she dug the buried skeleton out of its shallow grave.

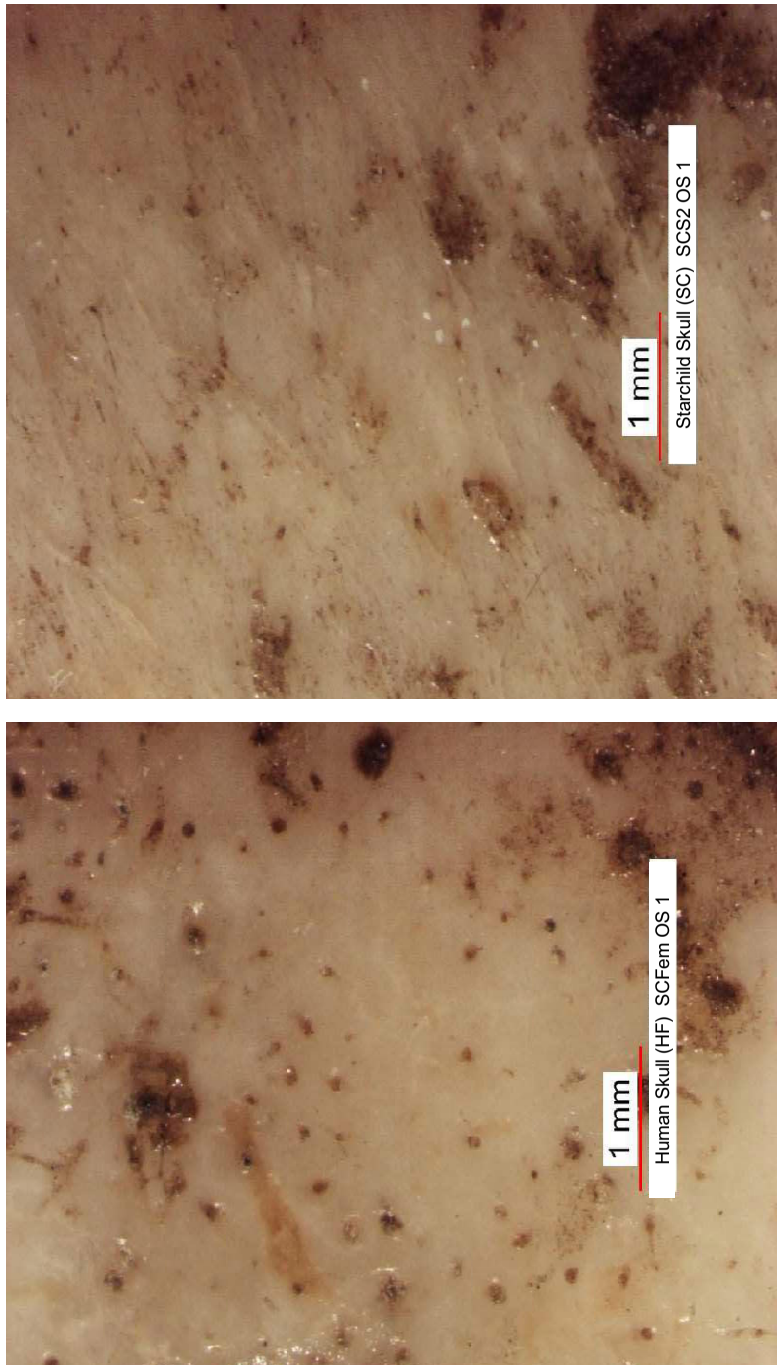
The girl attempted to recover both skeletons but lost most of the bones in a flash flood. Ultimately, all she brought back to her home in El Paso was the two skulls, both somewhat battered in the flood, and a detached piece of maxilla that belonged to the "misshapen" skeleton she found in the grave. For the remainder of her life she kept both skulls in a cardboard box as souvenirs of her trip, assuming the odd looking skull was the result of some kind of human deformity.

The woman died in the early 1990s, and in 1998 the two skulls were given to Ray and Melanie Young of El Paso, Texas. Melanie, a neonatal nurse and physical therapist who understood that the "misshapen" skull was in no way the result of a typical human deformity. She was determined to have it expertly evaluated to find out what it really was. To do that, she and her husband Ray enlisted the help of Lloyd Pye, an author and researcher in the field of alternative knowledge, who became the skull's caretaker and research coordinator.



Lloyd Pye became Director of the Starchild Project in February of 1999, and in the course of the past twelve years has overseen the scientific testing of the skull in three countries (the US, Canada, and England). While doing that he has regularly informed the media and the public about those results, and he continues to oversee ongoing research that will lead to an ultimate definitive conclusion about the unusual skull.

Human/SC Outer Surfaces



Outer surfaces of Human on left and SC on right make clear they are apples and oranges in this comparison.