

## Endogenous Retroviruses

“Endogenous retroviruses provide yet another example of molecular sequence evidence for universal common descent. Endogenous retroviruses are molecular remnants of a past parasitic viral infection. Occasionally, copies of a retrovirus genome are found in its host's genome, and these retroviral gene copies are called endogenous retroviral sequences. Retroviruses (like the AIDS virus or HTLV1, which causes a form of leukemia) make a DNA copy of their own viral genome and insert it into their host's genome. If this happens to a germ line cell (i.e. the sperm or egg cells) the retroviral DNA will be inherited by descendants of the host. Again, this process is rare and fairly random, so finding retrogenes in identical chromosomal positions of two different species indicates common ancestry.”

<http://www.talkorigins.org/faqs/comdesc/section4.html#retroviruses>

Evolutionists claim that retroviral DNA provides irrefutable evidence for a universal Common descend and specifically between humans and Chimps (Chimps are suppose to be our closer relative.)

1) First of all it is important to mention that the similarities within retroviral DNA where not predicted by scientists, this “prediction” was made after the fact was discovered, for example evolutionists did not predict that chimps and humans should share a certain number of Endogenous Retroviruses, they simply use it as evidence for evolution after the similarities where discovered.

2) An other objection; is that retroviral DNA does not show an apparent link between mammals and other classes of animals, and in fact the difference between retro genes in vertebrates and invertebrates is very significant, and the supposed retro genes in invertebrates are not even considered ERVs by some scientists.

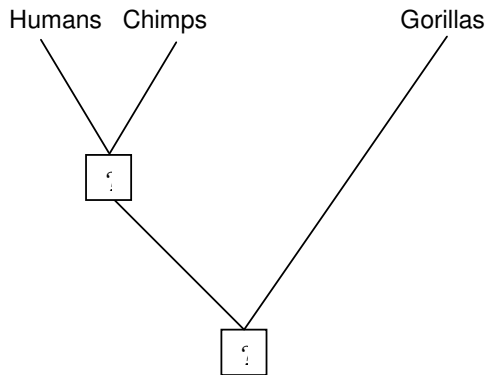
This is a very important point because if evolutionists claim that retroviral DNA proves that all mammals have a common ancestor then, if we use the same logic, retroviral DNA disproves the idea of mammals having a common ancestor with other classes. For example evolutionary theory claims that fish and humans have a common ancestor however they do not share any ERVs as we would expect if evolution is true.

To overcome this claim, evolutionists claim that since fish and humans share a very old ancestor, they share very old ERVs therefore these ERVs had enough time to evolve independently in humans and their ancestors and modern fish and their ancestor, and since the common ancestor between humans and other mammals, and specifically with other primates is relatively young, ERVs did not evolve (change) too much. However evolutionists fail to provide a rate in which and ERV can change, and they fail to provide a mechanism in which and ERV can change so drastically and pass it to the next generation, but there is not evidence supporting this claim. This argument also assumes evolution to be true, so which one is it?

- a) ERVs prove evolution
- b) Evolution proves ERV

In other words if evolutionists are using retroviral DNA to prove evolution, then they can not assume evolution in their arguments.

3) The phylogenetic tree looks something like this



According to the phylogenetic tree Chimps are closer to Humans than to Gorillas, they claim to have overvaluing evidence supporting this claim, if this claim is true, and if evolutionists interpreted ERVs correctly, then Gorillas and Chimps can not share an ERV, unless, this ERV is also present in humans, therefore finding an ERV in chimps and gorillas, but not in humans should falsify evolution, or at least the argument on ERVs, however there is at least 1 ERV from the family K that is present in chimps and gorillas, but not in humans, this ERVs are in orthologous position, therefore this fact should falsify evolution.

Evolutionists claim that this does not falsify evolution because maybe a retrovirus infected the common ancestor of gorillas, humans and chimps, but humans lost the ERV recently, however this makes the argument on ERVs impossible to falsify, besides evolutionists fail to explain how many of this irregularities are allowed, without contradicting evolution, they fail to provide a process in which an ERV can disappear, they fail to provide a rate in which ERVs disappear, besides if one human somehow lost an ERV, only some of the descendents of this human should lack this ERV, but not all humans.

From Talk Origins:

### **Potential Falsification:**

It would make no sense, macroevolutionarily, if certain other mammals (e.g. dogs, cows, platypi, etc.), had these same retrogenes in the exact same chromosomal locations. For instance, it would be incredibly unlikely for dogs to also carry the three HERV-K insertions that are unique to humans, as shown in the upper right of Figure 4.4.1, since none of the other primates have these retroviral sequences.

<http://www.talkorigins.org/faqs/comdesc/section4.html>

According to talk origins finding an ERV in dogs and humans but not in other primates would falsify evolution, however finding an ERV in dogs and humans but not in other primates is like finding an ERV in chimps and gorillas but not in humans, and if we ever find an ERV in humans and dogs but not in other primates evolutionists will simply claim that all the primates except for humans lost the ERV recently, the argument on ERVs is simply impossible to falsify.

4) The argument on ERVs assumes that retroviral DNA is junk DNA, this assumption is known to be wrong in at least some cases, and even though some ERVs do not have any apparent function, this does not mean that ERVs had always been useless, and it is also possible that all ERVs have a function but has not been discovered in some cases, after all there are countless examples of supposed pseudo genes that turned out to be functional, when farther research was made.

For example in mammals ERVs are a very important part of the reproductive system, ERVs protect the embryo from the mother's immune system, Also Retroviral DNA cause the formation of the placental syncytium in order to limit the exchange of migratory cells between the developing embryo and the mother. Also some ERVs protect organisms from diseases, such as HIV, (humans do not have the ERV that protect others from HIV)

ERVs (like any other protein) need to be in very specific places in order to be functional, are we to believe that retroviruses attacked randomly in the one and only place in which they can be functional?

To try to refute the argument evolutionists claim that ERVs where originally useless, and then they evolved and become functional, but once again, this arguments assumes evolution, and is based on circular reasoning.

Chimps and humans share a considerable amount of ERVs in the same place, so what? God put them in the same place because otherwise ERVs would have not been functional and reproduction would have been impossible. A common question asked by evolutionists is: *Why did God created ERVs to look as if evolution were true?* But this question is simply out of place, a better question is: *Why did ERVs evolve as if they where designed?*

5) Finally evolutionists claim that if creationists prove that retroviral infections are not random, the argument would be refuted, but how do they know that ERVs are in fact retroviral insertions? How do they know that ERVs came from retroviruses? The only thing that we really know is that ERVs and retroviruses are similar (almost identical) but this does not mean that ERVs came originally from retroviral infections, maybe it is the other way around, maybe retroviruses came originally from ERVs after all retroviruses can not live without a host genome, which means that the first generation of retroviruses came from inside the genome, once you accept this as a fact or at least as a reasonable possibility, it is logical to assume that retroviruses came from retroviral DNA. In other words it is my hypothesis that God created the genome with ERVs and after the fall some ERVs become infectious retroviruses, this hypothesis explains the fact that most ERVs do not have an infectious counterpart.

## Conclusions

Retroviral DNA in no way proves evolution beyond reasonable doubt, retroviral DNA is perfectly consistent with creationism, and evolution is not needed to explain the facts related to Endogenous Retroviruses, in fact if evolution would have never been proposed by Darwin (or some one else) Retroviral DNA would not create any

controversy in the scientific community, ERVs are simply proteins that serve specific functions (just like any other protein.) Evolutionists claim that ERVs differ from other proteins because ERVs are junk DNA and retroviral insertions; however these assumptions are known to be wrong, or at least highly questionable, besides it is impossible to falsify the argument on ERVs, every single possible scientific discovery would fit in to the evolutionary model.

## Sources

<http://www.anodis.com/nota/1963.asp>  
<http://www.genciencia.com/2006/05/26-el-origen-del-virus-del-sida>  
<http://www.ctv.es/USERS/fpardo/vih1.htm>  
<http://jvi.asm.org/cgi/content/abstract/65/4/1743>  
[http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=PubMed&list\\_uids=14567911&dopt=AbstractPlus](http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=PubMed&list_uids=14567911&dopt=AbstractPlus)  
<http://www.springerlink.com/content/k2888k176321g865/>  
[http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6WSN-49TP1CG-5&\\_user=10&\\_coverDate=10%2F17%2F2003&\\_rdoc=1&\\_fmt=&\\_orig=search&\\_sort=&\\_view=c&\\_acct=C000050221&\\_version=1&\\_urlVersion=0&\\_userid=10&md5=6b19b33aa8102828446139ee509df245](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WSN-49TP1CG-5&_user=10&_coverDate=10%2F17%2F2003&_rdoc=1&_fmt=&_orig=search&_sort=&_view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=6b19b33aa8102828446139ee509df245)  
<http://www.medicinabuenaosaires.com/vol56-96/3/nefroytergen.htm>  
<http://www.trueorigin.org/virus.asp>  
<http://www.sciencedaily.com/releases/2006/09/060911233630.htm>  
<http://0-proquest.umi.com.millennium.itesm.mx/pqdlink?index=0&did=523587421&SrchMode=1&sid=1&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1202924761&clientId=23693&cfc=1>  
<http://actualidad.orange.es/carticulos/60267.html>  
<http://www.taringa.net/posts/839871>  
<http://www.creces.cl/new/index.asp?tc=1&nc=5&tit=&art=860&pr=>  
[http://www.youtube.com/watch?v=-hoo\\_dIOP8k](http://www.youtube.com/watch?v=-hoo_dIOP8k)  
[http://209.85.173.104/search?q=cache:yofv5gQeYB0J:www.uam.es/personal\\_pdi/ciencias/genhum/bibliogenoma/retrovirus1versionfinal.doc+retrovirus+endogeno&hl=es&ct=clnk&cd=1](http://209.85.173.104/search?q=cache:yofv5gQeYB0J:www.uam.es/personal_pdi/ciencias/genhum/bibliogenoma/retrovirus1versionfinal.doc+retrovirus+endogeno&hl=es&ct=clnk&cd=1)  
<http://www.current-biology.com/content/article/abstract?uid=PIIS0960982201002275>  
<http://www.talkorigins.org/faqs/comdesc/section4.html#transposons>  
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1779541>  
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1054887>  
<http://paulmoresby.blogspot.com/2007/01/la-falsa-dicotoma.html>  
<http://www.vigonet.com/curacion/#2>