

Are Humans and Chimps Related?

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It is one of the most-asked questions we now receive at Answers in Genesis: If human and chimp DNA are so similar, does this show a common ancestor?

When studying the human genome and its similarity to that of the chimp, scientists have concluded that 96–98% of our genome is similar. Much of the similarity lies in the regions of the DNA that result in proteins (the genes). It seems logical that if a protein performs a certain function in one organism, and that function is necessary in other organisms, then the same protein would be utilized by multiple organisms. Just as paintings from the same painter look similar, so do the proteins (and thus, genes) from a variety of organisms designed by a common Designer.

It should be pointed out that most of the DNA sequence performs an unknown function and has been largely dismissed as “junk” DNA. However, increasing evidence supports the view that “junk” DNA performs an important role in the regulation of genes/proteins and has relevance to this question of human/chimp similarity. For example, a recent report from the ENCODE project (ENCyclopedia of DNA Elements) found that many “junk” DNA sequences differed among many mammalian species (including chimps and humans).¹ This may help explain the differences in organisms that share many of the same genes (and thus, proteins) but are very different physically, mentally, etc.

Thus, the physical and mental differences between humans and chimps may be due to the differences in the sequences and, thus, functions of the so-called “junk” DNA. This understanding should leave us more mindful of the awesome complexity of the Creator and His creation of DNA.

Other areas of difference between human and chimp DNA appear to involve regions which are structurally different (commonly called “rearrangements”) and areas of heterochromatin (tightly packed DNA).

Here are some other interesting differences between the human and chimp genomes which are often not reported:

- The amount of chimp DNA is 12% larger than what it is in humans.
- The 2–4% difference in the genomes is actually millions and millions of bases (individual components of DNA).
- In many areas of the DNA sequence, major “rearrangements” seem apparent. These account for perhaps 4–10% dissimilarity between humans and chimps.
- Chimps have 23 pairs of chromosomes and humans have only 22 (excluding pairs of sex chromosomes for both species).²

While the differences between humans and chimps can be found in DNA, the Bible makes it clear that chimps and humans are not related. Humans were made separate from the animals, and humans were the only ones made in the image of God (Genesis 1:26–27).

Footnotes

1. Margulies, E.H. et al., 2007. Analyses of deep mammalian sequence alignments and constraint predictions for 1% of the human genome. *Genome Research* 17:760–764.
2. This is sometimes used as evidence for evolution. However, a closer examination refutes this claim. For more, see Lightner, J. K., 2007. A tale of two chromosomes. *Answers in Depth* 2:160–162.

Editor's note: Dr. Purdom was commissioned recently by a Christian magazine to write a short column on the theme of science and the Bible. She wrote such a timely article on a topic that comes up so frequently that we decided to post it to our website, with only minor adaptation.