

Is it scientifically proven that there are 12 strands of DNA?

<https://answers.yahoo.com/question/index?qid=20090609130833AAECtMF>

Answer by Dominic H

“As you all maybe aware, apparently we use about 10% and the other 90% is suppose to be 'Junk DNA'

“The term 'junk DNA' was coined in the 70's as a provisional label for parts of the genome for which no function had yet been established. Since then we have found various regulatory sections in 'junkyard regions' of the DNA such as transposons, enhancers and promoters. They all play an important role in maintaining and regulating DNA, turning some genes off, and activating others. (See: http://en.wikipedia.org/wiki/Gene_regula... Some of the 'junk DNA' has also been found to be instrumental in directing cell differentiation during embryonic development. (See: <http://www.nature.com/nature/journal/v44...>) So while some of the remaining 'junk' may well just be that, most likely it harbors some secrets yet.

“The question here today is, has any actual group of scientists scientifically proven that there are another 10 strands of DNA, or obviously just the two.

“You might be surprised to learn that the nucleus of each cell actually contains 92 strands of DNA. How do I get to this? Well, you have 46 chromosomes (or 23 pairs) each composed of a double stranded DNA molecule coiled around various types of scaffold proteins and histones. (See: <http://www.molecularstation.com/molecula...>) So 46 molocules each containing 2 strands =92) Actually, If you include the double-stranded circular mtDNA found in the mitochondria in the cytoplasm of cells, you could say you have 94 total strands of DNA. (See: <http://en.wikipedia.org/wiki/Mitochondri...>)

“The misconception about having only 2 strands comes in I think in part due to the image of the double helix immortalized in textbooks everywhere and more mention being made of the sex chromosomes than any of the others. (As an experiment: ask someone, say a family member what chromosomes a man has - they will probably just mention the X and Y and not any of the others) As for the people who make claims about 12 strands? Well, either they can't count, or they are proposing that each DNA molecule is composed of 12 strands?

“Personally, I don't think that a structure like this would even be functional. The bottom line is that only 1 strand is necessary (the other is really a backup) Regardless, studies of DNA under the electron microscope (and atomic force microscope) have confirmed that DNA has a double helix structure, as worked out theoretically by Watson and Crick in the 50's using X-ray diffraction. Actually scientists can now build various 3D structures with DNA molocules, and so are quite confident and intimately familiar with it's structure. (See: <http://www.wired.com/wiredscience/2009/0...>)

“I can't help but smile when I see a claim on the web, about DNA activation- have even been tempted to send an email to the registrant of the site informing them that more strands exist than they are claiming. (As an experiment, it could be fun to monitor a couple of DNA activation sites to see how fast the word would spread to others) One day when I'm very bored maybe ... We'll see. :)

“I mean, aren't we talking about there being loads of little Xmen people running around?

“Apparently. I haven't seen any. Have you? According to dna-activation-power.com, people who have undergone 12 strand DNA activation are supposed to be telepathic, be able to heal others and reverse the aging process e.t.c I'd love to see that DNA under the microscope - maybe I can convince the owner of the website to send me a sample. lol