

Mitochondrial Eve Theory

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The genetic common denominator of the Asian and Zimbabwe races is theorized to come from the original “African Eve.” By means of Mitochondrial DNA (mtDNA) comparison it has been proven that mtDNA, is inherited by offspring only through mother. “Eve” gave birth to a generation that had offspring that inherited similar DNA codes and physical characteristics, but mixed with different males’ DNA. After long periods of time a community formed from this first group of descendants. Due to basic needs, they migrated from Africa to explore new areas, introducing environmental factors which influenced their species and presented opportunities to disperse new genetic material at large.

A cell’s nucleus contains DNA; also inside the cell, an organelle called the mitochondria, have mtDNA. This organelle produces chemical and energy reactions within the cell and can have mutations just like DNA. At conception a sperm meets an egg, but detaches its tail when entering, thus making the females’ mtDNA the only mitochondria inherited. Furthermore, these genetic discoveries by scientists Vincent Sarich and Alan Wilson have linked females from different racial backgrounds to an ancient mitochondrial similarity of a black woman indigenous to Africa. These two researchers with the University of California at Berkeley sampled DNA from present day Africa. These samples show more diversity in DNA

than any other continent in the world, which supports the theory that people have lived there longer than anywhere else in genetic history.

For a species to continue its existence for the future it must reproduce. Obviously “Eve” had many children, and children’s DNA content is supported. These offspring contained such specific advantages for survival over the rest of the population that the recessive traits were weeded out. Paleoanthropologists conclude that “Eve” lived with around 12,000 of her kind, says Roberta Cann and her team of colleagues that Homo sapiens existed at least 200,000 years ago, making it very possible for her to have had relations with many men, and having different children with differing DNA. No speculations have been made that “Eve” was a baby-machine, or that her children would have all been female. But, what scientists who study this theory do explain is that “Eve’s” children were not necessarily numerous, but their DNA prepared them and gave advantages with what natural selection (Darwin’s theory) had in store for their kind. This also suggests the survival of the fittest influenced the success of mtDNA being passed on.

As the number of descendants matured and had offspring, the community became over crowded. Due to three mannerisms of mankind, curiosity, satisfaction of physical needs, and claiming territory, these people migrated for new lands. Each of “Eve’s” migrating descendants who survived environmental challenges passed on this original mtDNA that they had received from her.

In conclusion, the “African Eve” is the ancient relative to every human. Her relatives roamed the Earth and passed on the dominant DNA and remnants of linking of mtDNA.