

Appendix 1: Y-chromosome Adam and Mitochondrial Eve.

Y-chromosome Adam.

The human genome comprises 23 pairs of chromosomes that contain genetic information; one set from each parent. One of these 23 pairs is made up of the sex chromosomes: XX for female and XY for male. Men inherit the Y chromosome from their biological father (Tuinstra & Robinson, 2021).

Scientists who have examined mutations in the Y chromosome of men from around the world have discovered that all men alive today can be traced back to a single male ancestor. They have even named him '**Y-chromosome Adam**' (Tuinstra & Robinson, 2021).

Evolutionists will of course always seek to interpret this within a long-age setting, stating that while a number of males lived at the same time as Y-chromosome Adam, only his Y chromosome lineage survived. However, this finding of a single Y chromosome ancestor was not expected or predicted from the outset by evolutionary theoreticians. And it is wholly consistent with the Genesis account (Tuinstra & Robinson, 2021).

Mitochondrial Eve.

Mitochondrial DNA (mtDNA) indicates that all people have descended from a single woman, called mitochondrial Eve (Wieland, 2006).

Mitochondrial DNA is inherited from the mother, via the egg, and has been checked for variations in the world-wide human population in an attempt to determine genetic ancestry and geographic location of human origins (Gibbons, 1993).

From this approach came the idea of 'African Eve'—the hypothesis that humans had a female parent, in Africa, and at a time so recent as to surprise most evolutionists (Wieland, 1993).

Creationists have enthusiastically welcomed the '**mitochondrial Eve**' hypothesis (i.e. that all modern humans can be traced back to one woman) because it clearly supports biblical history and contradicts evolutionary scenarios. A few years ago I reviewed the status of mitochondrial Eve research, showing that the identification of mitochondrial Eve with biblical Eve was becoming stronger as more evidence on measured mutation rates accumulated (Wieland, 1998).

I explained how the mitochondrial Eve findings were in line with biblically based expectations. While not proving the biblical Eve, they were consistent with her reality, and were not predicted by evolutionary theory. However, the dates assigned to mitochondrial Eve had been said by evolutionists to rule out the biblical Eve (Wieland, 2006).



Artist's impression of a eukaryote cell, showing organelles, including mitochondria that contain DNA.