

## Mitochondrial DNA

Allan Wilson and Mark Stoneking of the University of California at Berkeley and Rebecca Cann of the University of Hawaii conducted research in 1987 which indicates that all 5 billion people living today came from one woman who lived in the sub-Saharan region. Their theory, known as the "Eve theory," implies that modern humans did not evolve slowly in many parts of the world as most scientists have long believed, but rather originated in one area.

They based their theory on an analysis of mitochondrial DNA, a form of genetic material found outside the nuclei of human cells, which they had collected from 147 women representing five broad geographical regions around the world. Unlike the DNA found in the nuclei of human cells, mitochondrial DNA is only passed down from generation to generation through the mother. The researchers maintain that "Eve" is the only woman whose genetic material can be traced down to everyone living today.