Ancient Eurasian DNA helps untangle humanity's twisted family tree

Advances in ancient DNA sequencing are shedding light on the genetic links between our Stone Age ancestors and modern humans, say Chinese researchers, allowing researchers to untangle the twisting branches of the human family tree.

In a paper published in Trends in Genetics, scientists at the Chinese Academy of Sciences in Beijing summarise this flood of new research, reviewing analyses of the genomes of 24 individuals who lived in pre-agricultural Eurasia between 45,000 and 7,500 years ago. They outline new insights covering how ancient modern humans are related to present-day humans, how the populations migrated and interacted with each other, and how they interbred with archaic hominins such as Neanderthals and Denisovans.

The review found at least four distinct populations: Europeans, Asians, and two that did not contribute substantially to present-day populations. By between 14,000 and 7,500 years ago, unexpected genetic connections were found between individuals from opposite sides of Eurasia, providing evidence for greater interactions between these geographically distant groups — likely due to climate and cultural change.

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According to biological anthropologist Michael Knapp at the University of Otago, New Zealand, the ability to analyse early modern human genomes has resulted in "new and exciting insights into our ancestry, with new findings sometimes coming out on a monthly basis".

Read full, original post: Paleolithic human DNA reveals migrations and exchange