Newly discovered ancient human skeleton contains lost Neanderthal DNA

Another week, another ancient human genome. We just recently covered the <u>oldest modern human</u> genome yet described. Now, another paper takes a look at the DNA from a different modern human genome and comes to similar conclusions: interbreeding with Neanderthals was already deep in the past as of 37,000 years ago. But researchers were able to find stretches of the Neanderthal genome that are no longer present in any modern human populations that we've sampled.

The skeleton in this case comes from the European area of Russia; it was found at a site called Kostenki-Borshchevo north of the Black Sea. The team behind the new paper (which does not include Svante Pääbo, who has pioneered ancient genomics) was only able to get a rough draft of the individual's genome, on average sequencing every base 2.4 times. Thus, the sequence is likely to include a large number of errors and gaps. These make the conclusions a bit more tenuous than previous work but shouldn't bias them in any particular direction.

One thing the results make clear is that humanity's migration out of Africa was complicated. K-14, as the skeleton is called, shares very few of the DNA differences that are associated with East Asian populations, as has been the case with the Siberian modern human skeletons we've looked at. All of which suggests that East Asians and Eurasians split off early and may even have engaged in separate migrations out of Africa or the Middle East. K-14 also lacks common variants found in Native Americans, leaving a single Siberian skeleton as the only one that has an affinity to them.

Despite its location, K-14 also lacks a strong genetic connection to modern Europeans, instead having a general affinity for other early Eurasian populations. In fact, the authors conclude, it may not even make sense to look for specific affinities. "Instead of inferring a few discrete migration events from Asia into Europe," the authors write, "we now see evidence that humans in Western Eurasia formed a large metapopulation with gene flow in multiple directions occurring repeatedly and perhaps continuously."

In other words, don't expect to find a couple of populations that were *the* European ancestors; instead, there was a large pool of Eurasian populations that regularly intermingled.

Read full original article: 37,000-year-old Russian skeleton has Neanderthal DNA that's gone missing