

Study shows 28,000 year-old Europeans' DNA was like ours

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40,000 years ago, the Cro-Magnoid people – the first people who had a skeleton that looked anatomically modern – entered Europe, coming from Africa. In the July 16 issue of the open-access journal *PLoS ONE*, a group of geneticists, coordinated by Guido Barbujani and David Caramelli of the Universities of Ferrara and Florence, shows that a Cro-Magnoid individual who lived in Southern Italy 28,000 years ago was a modern European, genetically as well as anatomically.

The Cro-Magnoid people long coexisted in Europe with other humans, the Neandertals, whose anatomy and DNA were clearly different from ours. However, obtaining a reliable sequence of Cro-Magnoid DNA was technically challenging.

"The risk in the study of ancient individuals is to attribute to the fossil specimen the DNA left there by archaeologists or biologists who manipulated it", Barbujani says. "To avoid that, we followed all phases of the retrieval of the fossil bones and typed the DNA sequences of all people who had any contacts with them."

The results demonstrate for the first time that the anatomical differences between Neandertals and Cro-Magnoids were associated with clear genetic differences. The Neandertal people, who lived in Europe for nearly 300,000 years, are not the ancestors of modern Europeans.

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