'Out of Africa' theory of human evolution challenged by eastern Mediterranean fossil evidence

The common lineage of great apes and humans split several hundred thousand years earlier than hitherto assumed, according to an international research team headed by Professor Madelaine Böhme from the Senckenberg Centre for Human Evolution and Palaeoenvironment at the University of Tübingen and Professor Nikolai Spassov from the Bulgarian Academy of Sciences. The researchers investigated two fossils of *Graecopithecus freybergi* with state-of-the-art methods and came to the conclusion that they belong to pre-humans. Their findings, published today in two papers in the journal *PLOS ONE*, further indicate that the split of the human lineage occurred in the Eastern Mediterranean and not – as customarily assumed – in Africa.



A 7.24 million year old upper premolar of Graecopithecus from Azmaka, Bulgaria. Credit: Wolfgang Gerber, University of Tübingen

Present-day chimpanzees are humans' nearest living relatives. Where the last chimp-human common ancestor lived is a central and highly debated issue in palaeoanthropology. Researchers have assumed up to now that the lineages diverged five to seven million years ago and that the first pre-humans developed in Africa.

The team analyzed the two known specimens of the <u>fossil</u> hominid *Graecopithecus* freybergi: a lower jaw from Greece and an upper premolar from Bulgaria. Using computer tomography, they visualized the internal structures of the fossils and demonstrated that the roots of premolars are widely fused.

"While great apes typically have two or three separate and diverging roots, the roots of Graecopithecus

converge and are partially fused – a feature that is characteristic of modern humans, early humans and several pre-humans including *Ardipithecus* and *Australopithecus*", said Böhme.

[Read the full study here.]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Scientists find 7.2-million-year-old pre-human remains in the Balkans