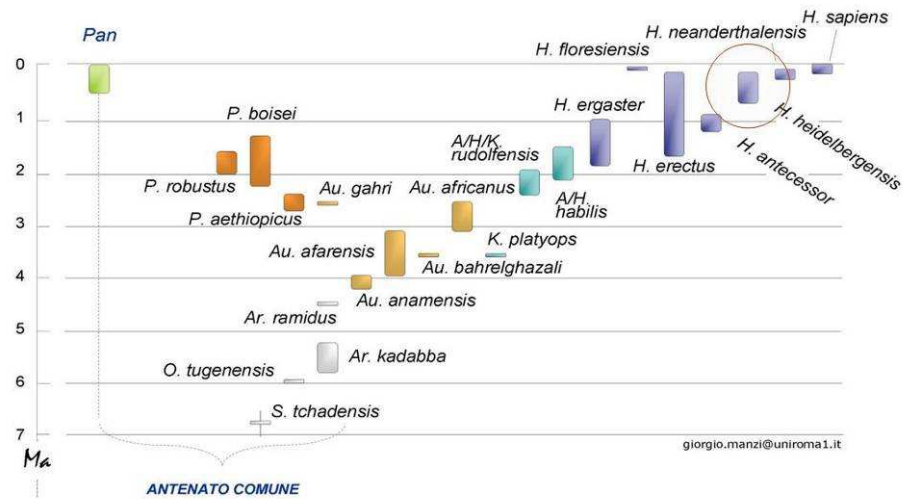
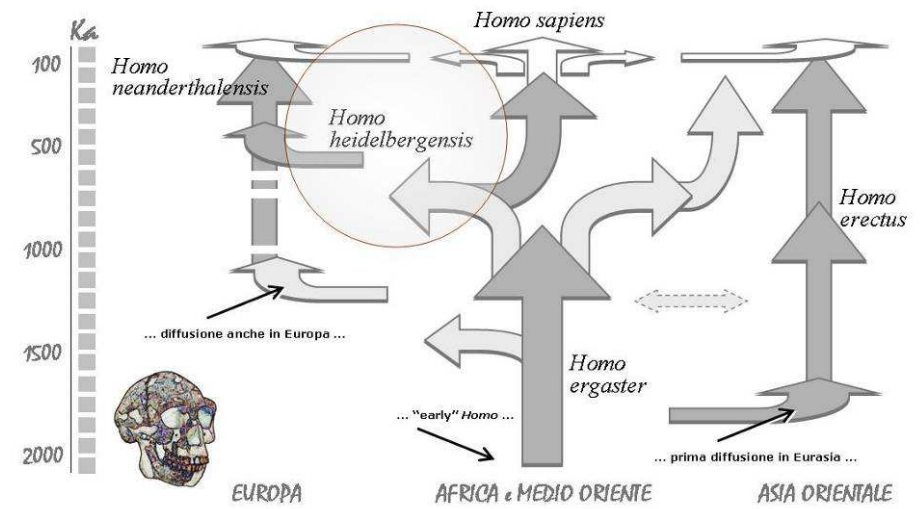


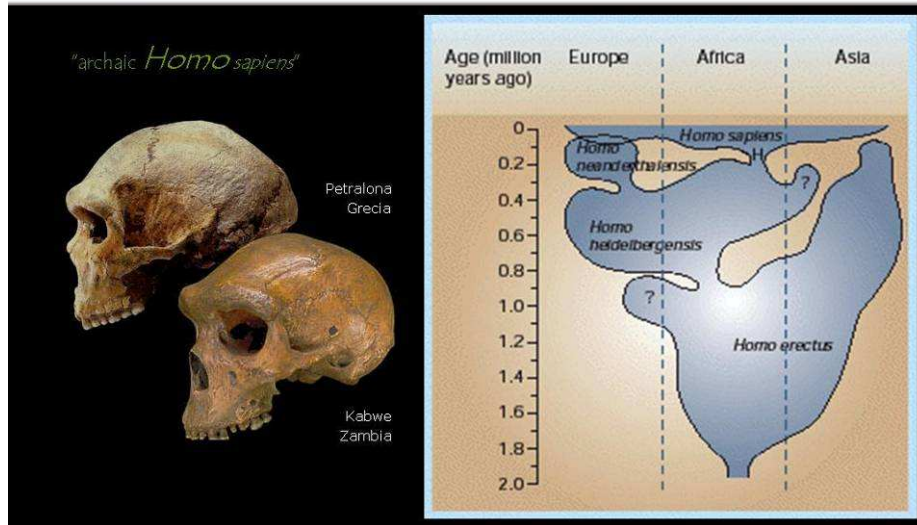
Homo heidelbergensis



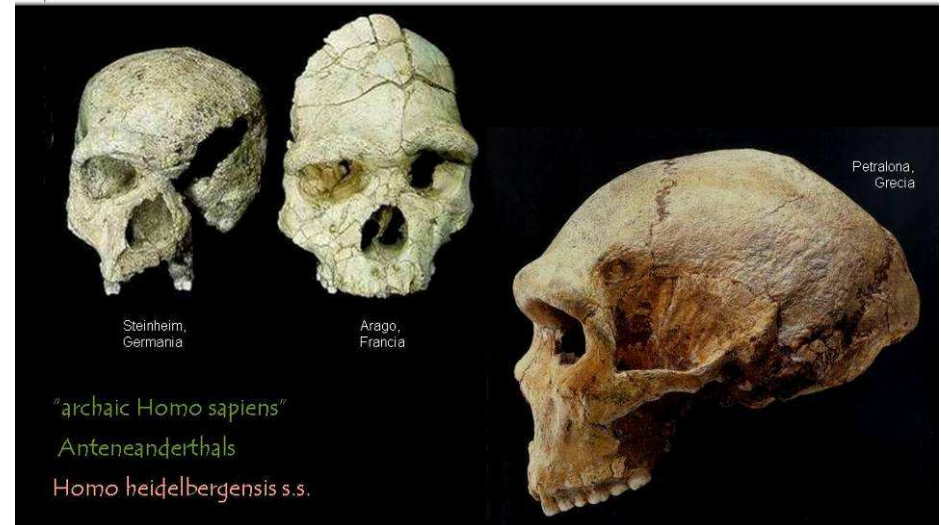
Il genere Homo



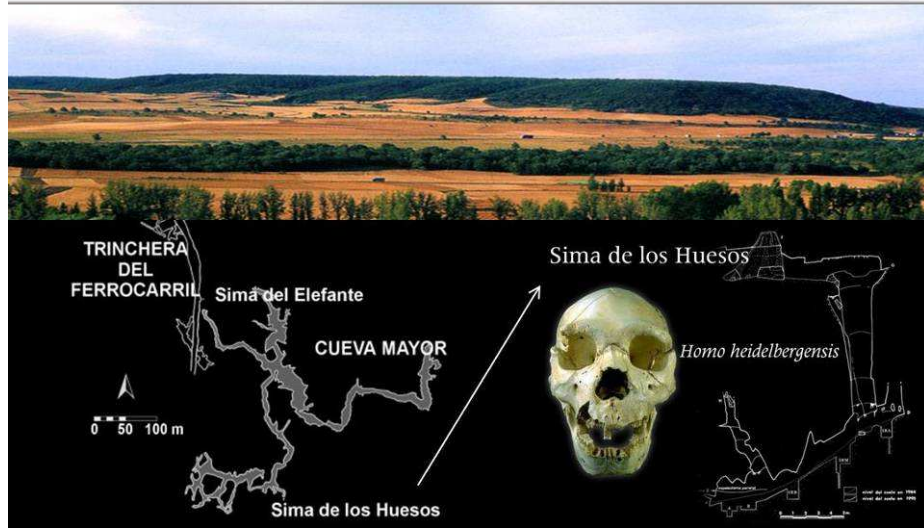
G.P. Rightmire 1996



Homo heidelbergensis - Europa



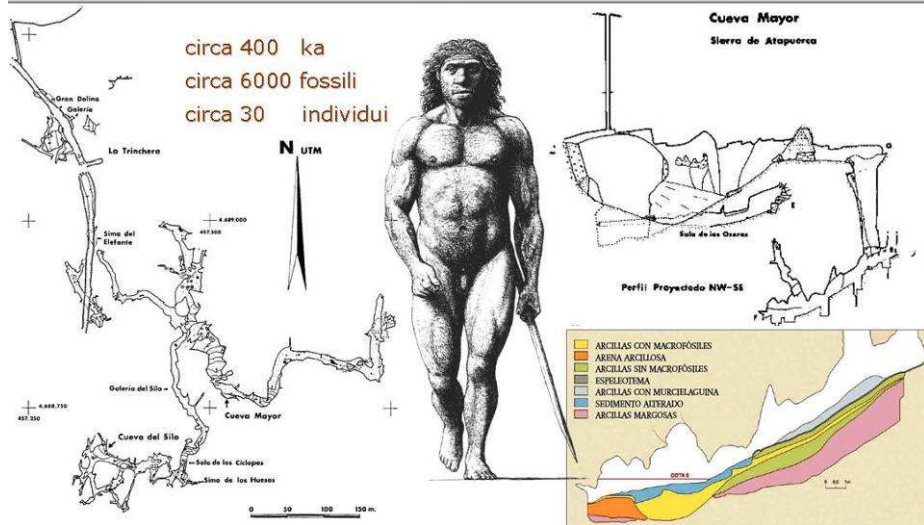
Sierra de Atapuerca (Burgos)



Atapuerca - Sima de los Huesos



Atapuerca - Sima de los Huesos



Atapuerca - Sima de los Huesos

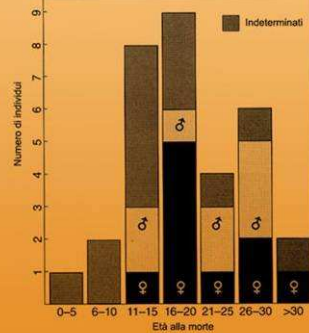


El misterio de la Sima

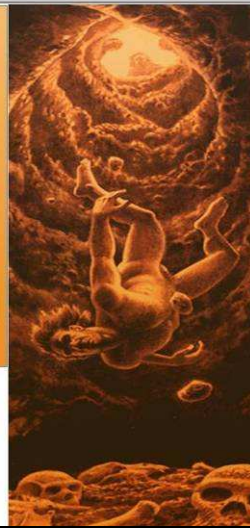
N = 32 individui appartenenti alla stessa popolazione biologica

Opportunità eccezionale di studiare la paleobiologia dei gruppi umani del Medio Pleistocene europeo.

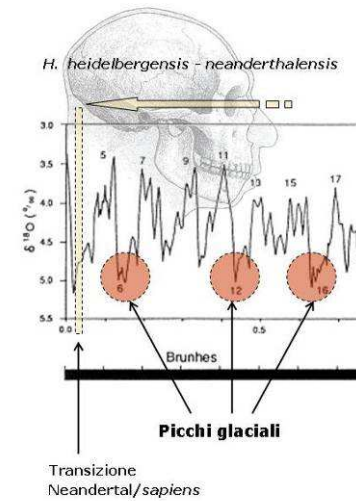
- Sex ratio ~ 1
- Bassa frequenza di infanti e bambini
- Alta mortalità tra gli adolescenti e i giovani adulti
- Bassa mortalità tra gli adulti maturi (> di 30 anni)



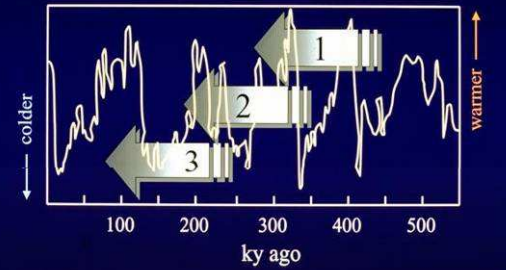
Accumulo intenzionale (la più antica "sepoltura"), accumulo accidentale, o "catastrofe" ...?



Crisi demografiche e bottlenecks

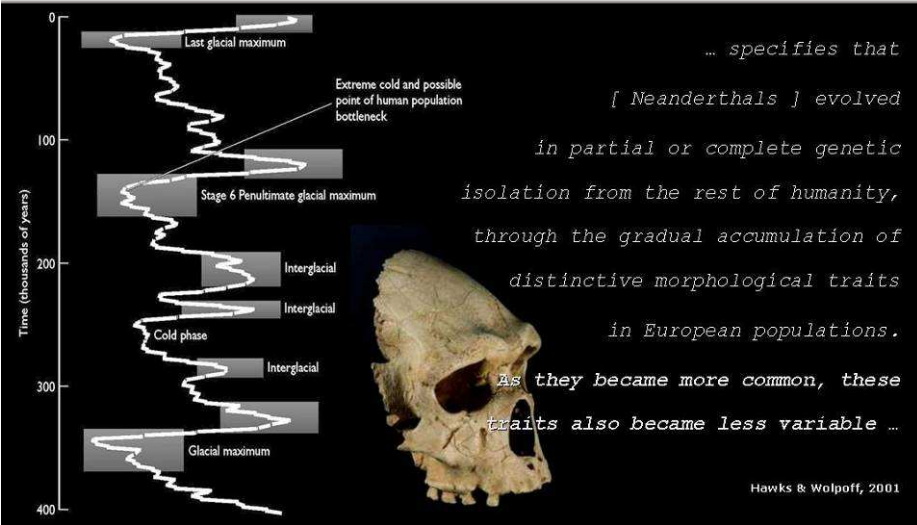


Accretion of Neandertal features

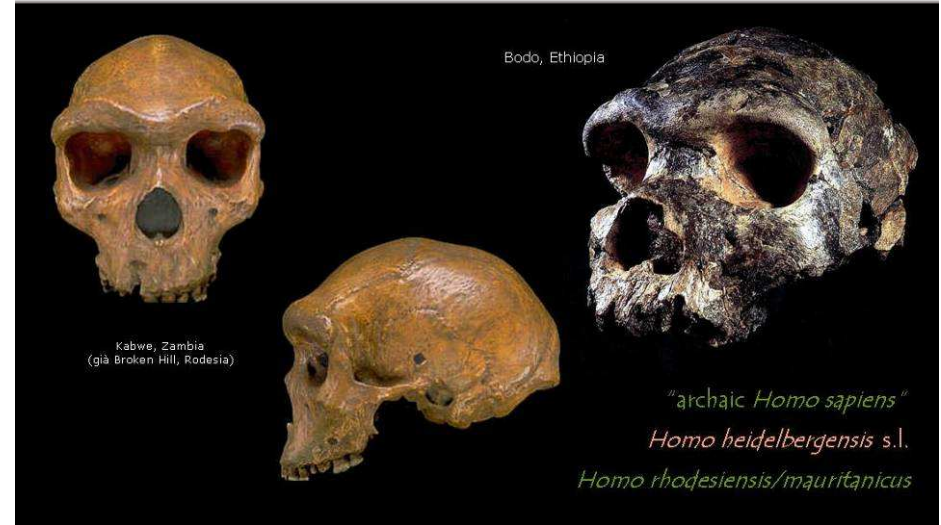


AnteNeandertals	→ prima di OIS 12	→ Cromeriano
Pre-Neandertals	→ OIS 11 - 9	→ Mindel-Riss
Early Neandertals	→ OIS 7 - 5	→ Riss + Eemian
Classic Neandertals	→ OIS 4 - 3	→ Würm

The "accretion" model



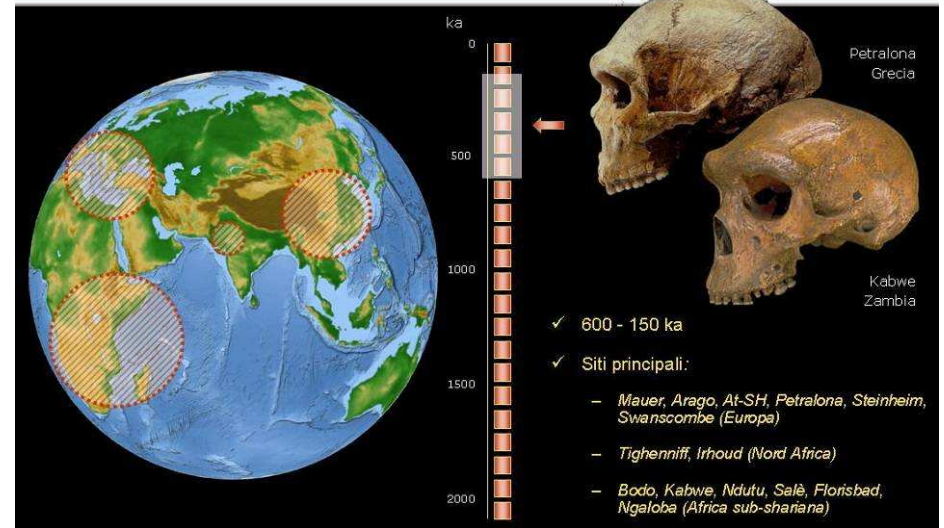
Homo heidelbergensis - Africa



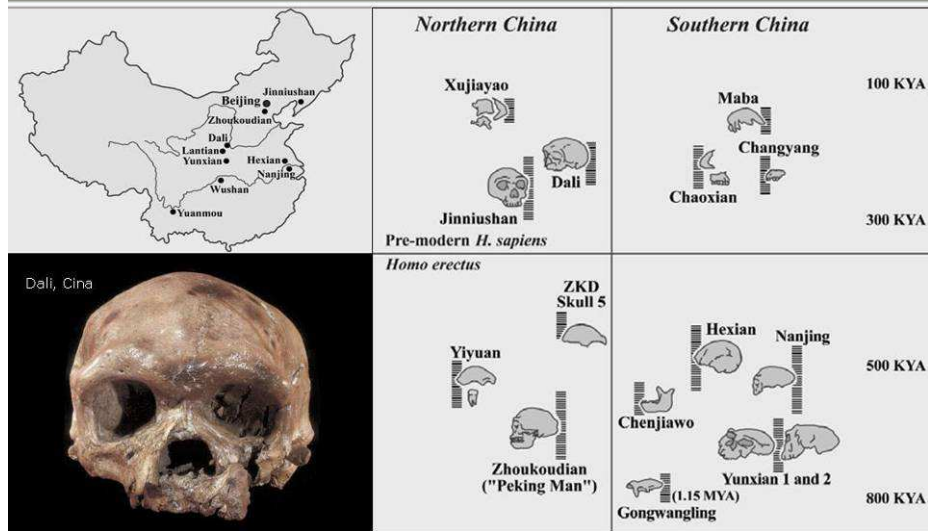
Homo heidelbergensis - Asia orientale



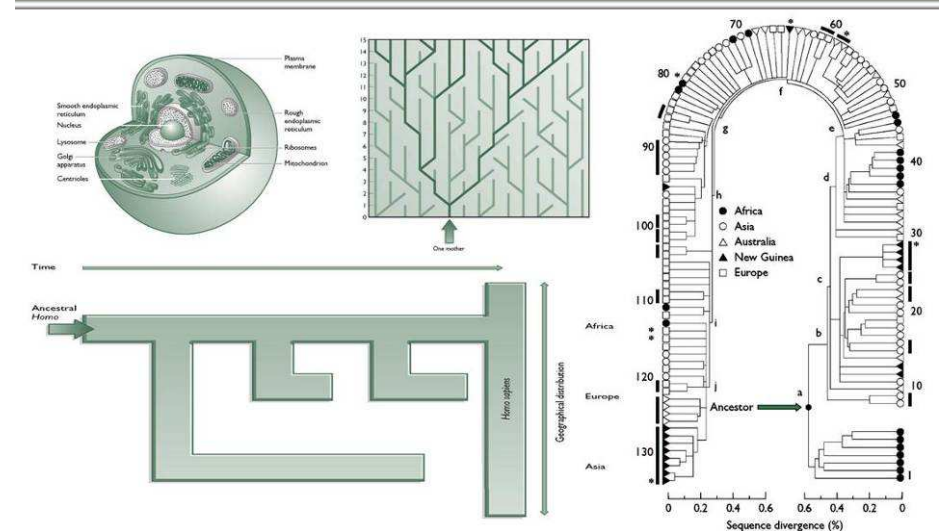
Homo heidelbergensis



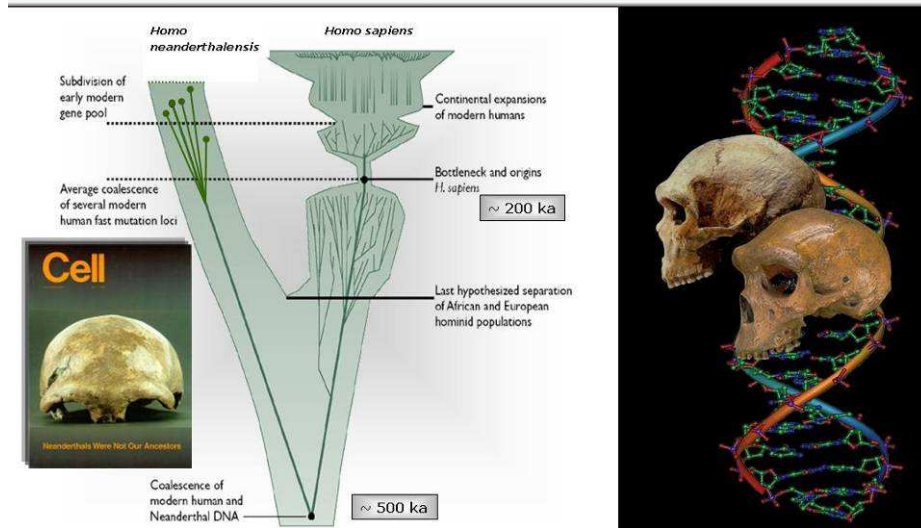
Cina - Homo erectus e ... non solo



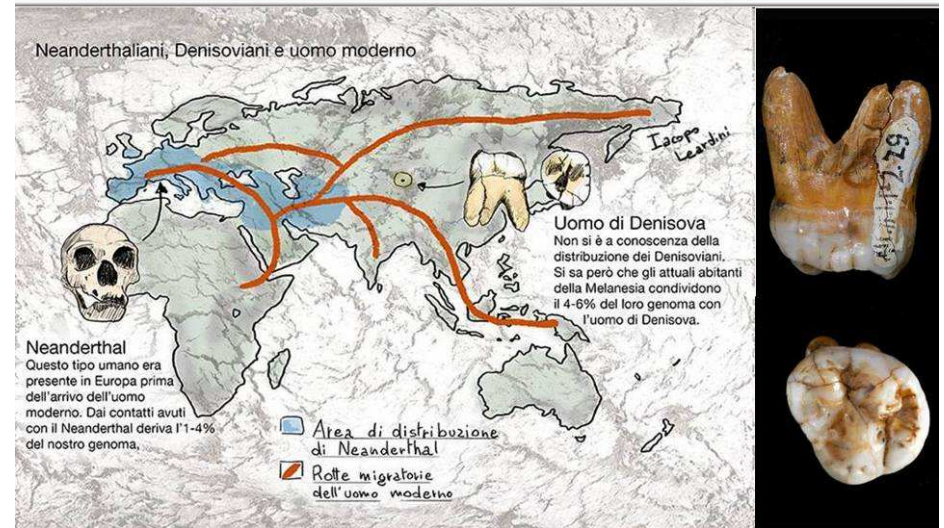
Il contributo del mtDNA



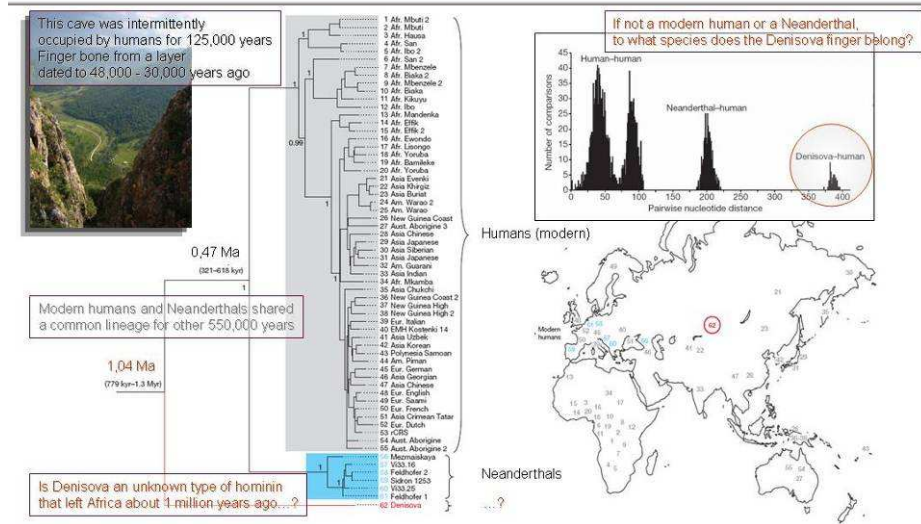
Coalescenza Neanderthal/sapiens



Ibridazioni (dicembre 2010)



Denisova (Nature, 25 marzo 2010)



Il genere Homo

