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Male mutations

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Men are thought to have a higher [mutation rate](#) than women and the male-to-female mutation ratio (the 'alpha' value) in primates has been estimated at around 4-6. This estimation has recently been [challenged](#), and it has been suggested that the alpha ratio may be as low as 1.7. In the April 11 [Nature](#), Makova and Li provide evidence supporting the higher estimates (*Nature* 2002, **416**:624-626). They sequenced over 10 kilobases of genomic DNA from a non-coding region of the Y chromosome and a homologous region on chromosome 3 in humans and apes (including bonobo, gorilla, siamang and gibbon). They came up with an alpha value of 5.25, confirming the higher earlier estimations and supporting the hypothesis of strong male-driven evolution of hominids. They suggest that ancient polymorphisms could lead to reduced estimates when comparing closely related species.

References

1. Estimate of the mutation rate per nucleotide in humans.
2. Unexpectedly similar rates of nucleotide substitution found in male and female hominids.
3. *Nature*, [<http://www.nature.com>]