

When did Eve live? C. Wills Calpeg 1992

If recently...

If Homo erectus

Human D-Loop

Distribution of transitions - many are at polymorphic sites

transversion - most are at non-polymorphic sites

Possible explanations

- ① selection against transversion
- ② transitions at equil. & transversion not
- ③ variation in transition rate w/in genome

G	TT	T
↓	↓	↓
A	CC	C

<u>Transition</u>	<u>Transversion</u>
G → A	G → C
A → G	A → C
T → C	T → A

May be sites w/ very high transition rate

Data

- compare seq.
- get sites when any two differ by one base
- these sites tend to be more polymorphic