

TABLE 4
**Mutation rates per genome per replication in microbes
with DNA chromosomes**

Organism	<i>G</i>	μ_b	μ_g
Bacteriophage M13	6.4×10^3	7.2×10^{-7}	0.0046
Bacteriophage λ	4.9×10^4	7.7×10^{-8}	0.0038
Bacteriophages T2 and T4	1.7×10^5	2.4×10^{-8}	0.0040
<i>Escherichia coli</i>	4.6×10^6	5.4×10^{-10}	0.0025
<i>Saccharomyces cerevisiae</i>	1.2×10^7	2.2×10^{-10}	0.0027
<i>Neurospora crassa</i>	4.2×10^7	7.2×10^{-11}	0.0030
Mean			0.0034

Values are from DRAKE (1991), excluding the two well defined outliers and updated slightly as described in the text. The updated *G* values are 168.8 kb for phage T4 (KUTTER *et al.* 1994), 4639 kb for *E. coli* (BLATTNER *et al.* 1997) and 12068 kb for *S. cerevisiae* (GOFFEAU *et al.* 1996).