



FIGURE 12.23. Mutation rates versus genome size. Mutation rates are shown for a variety of organisms relative to genome size. On the *bottom* portion of the graph, mutation is plotted per base pair per replication event. Note the downward trend, with mutation rate decreasing as genome size increases. On the *top* portion, mutation rate is plotted per genome per replication. Note the relative uniformity in the values across diverse organisms and genome sizes. RNA viruses (red): rhinovirus, poliovirus, vesicular stomatitis virus, and measles virus. DNA viruses (green): M13, λ , T1, and T2. Archaea (blue): Sac, *Sulfolobus acidocaldarius*. Bacteria (blue): Eco, *Escherichia coli*. Eukaryotic microbes (purple): Sce, *Saccharomyces cerevisiae*; Ncr, *Neurospora crassa*. Metazoa (black): Cel, *Caenorhabditis elegans*; Dme, *Drosophila melanogaster*; Mmu, mouse; Hsa, human.

12.23, modified from Sniegowski P. et al., *BioEssays* 22: 1057–1066, © 2000 John Wiley & Sons

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