

Supplementary Table S2. Rates of gain and loss of acquired genes in each lineage

	Branch	Branch length	Gains (kb)	Gain Rate* (kb/0.01)	Losses (kb)	Loss Rate* (kb/0.01)
Clade	SCE	0.00408	118	289	1.4	3
	SC	0.00185	6.1	33	18	97
	S4	0.00138	4.8	35	31	225
	S3	0.00145	0	0	51	352
	S2	0.00498	21	42	76	153
	S1	0.00039	5.9	151	29	744
	C1	0.00427	23	54	55	129
	E1	0.00406	132	325	19	47
	E2	0.00232	28	121	23	99
	U1	0.00136	26	191	6.3	46
	U2	0.00642	117	182	11	17
	Strain	<i>S. flexneri</i> 301	0.00019	5	263	5
<i>S. flexneri</i> 2457		0.00021	0.5	24	18	857
<i>S. flexneri</i> 8401		0.00044	4.4	100	52	1182
<i>S. boydii</i>		0.00679	23	34	65	96
<i>S. sonnei</i>		0.00340	21	62	49	144
<i>S. dysenteriae</i>		0.00565	8.6	15	163	288
<i>E. coli</i> K-12		0.00006	0	0	NA	NA
<i>E. coli</i> W3110		0.00008	0	0	NA	NA
<i>E. coli</i> EDL933		0.00018	4.5	250	11	1833
<i>E. coli</i> Sakai		0.00006	20	3333	19	1056
<i>E. coli</i> UTI89		0.00288	47	163	30	104
<i>E. coli</i> CFT073		0.00315	55	175	47	149
<i>E. coli</i> 536		0.00252	22	87	33	131

* The gain (loss) rate is calculated as the amount of DNA gained (lost) in kilobases for a branch length of 0.01.