

Time period- So far number of HGT events	$E(SI)$	Next event SI contribution			$E(SI)'$ (N in the exponential decay terms)	$E(SI)''$ ($\frac{dN}{dt}$ in the exponential decay terms)
		Old neighborhood	new neighborhood	The gene itself		
0	0	$2k$	$2k$	$2k$	$\frac{3}{n}$	--
$\frac{n}{6k}$	$\frac{1}{2k}$	$2k$	$2k$	$2k-1$	$\frac{3}{n} - \frac{3}{2kn}$	$-\frac{3}{2kn}$
$\frac{2n}{6k}$	$\frac{2}{2k}$	$2k$	$2k$	$2k-2$	$\frac{3}{n} - \frac{6}{2kn}$	$-\frac{3}{2kn}$
$\frac{mn}{6k}$	$\frac{m}{2k}$	$2k$	$2k$	$2k-m$	$\frac{3}{n} - \frac{3m}{2kn}$	$-\frac{3}{2kn}$