



Figure S2 Distribution of mutation fitness effects with various fitness functions

The DFE in simulations (below phase transition, as in **Figure 5.c**) is compared to the analytic prediction (eq. 9) for three choices of fitness function for which the quadratic approximation applies (detailed in **Figure 2.a.**): quadratic, near quartic and asymmetric. The upper panels show various distributions common to all simulations: pathway coefficients, correlations between mutation effects on mutable traits \mathbf{x} and mutation effects on \mathbf{x} themselves. The middle panels show the three alternative fitness functions. The bottom panels show the corresponding DFE in simulations (histograms) and the corresponding prediction (dashed lines, eq. (9)) for various distances to the optimum (same as **Figure 5**: $s_o = 0$, blue, $s_o = \bar{s}$, red, $s_o = 5\bar{s}$, brown).