50 parallel cultures (heterogeneous, increase=10) 100 Preferred model Homogeneous response (mutant fitness set to one) simulations Homogeneous response (mutant fitnesses permissive/stressful inferred) None 75 Heterogeneous response (rel. fitness set to zero) Heterogeneous response (rel. fitness inferred) Homogeneous response (mutant fitness set to one) 50 Percentage 25 0 0.0 0.25 0.5 0.75 1.0 Relative division rate of response-on cells