

Figure S10 Correlation coefficients generated by stochastic simulations that include fluctuations in global factors. Cell-to-cell variation in global factors such as the concentrations and activity of RNA polymerases, RNA degradosomes and ribosomes, and growth rates are included in the stochastic simulations. Variation in these global factors effectively alters the rate constants for transcription, mRNA degradation, translation, and protein clearance (see **Materials and Methods**). Error bars indicate s.e.m. of quintuplicate simulations. Results in **panels A-D** should be compared to **Figure 7B** (stochastic simulation without any variation in global factors). (**A**) Cell variation in the transcription rate (k_m) from 0.15 to 0.45 mRNA/min. (**B**) Cell variation in the mRNA degradation rate constant (k_{-m}) from 0.075 to 0.225 per min. (**C**) Cell variation in the translation rate (k_p) from 2 to 6 proteins/mRNA/min. (**D**) Cell variation in the protein clearance rate (k_d) from 0.015 to 0.045 per min.