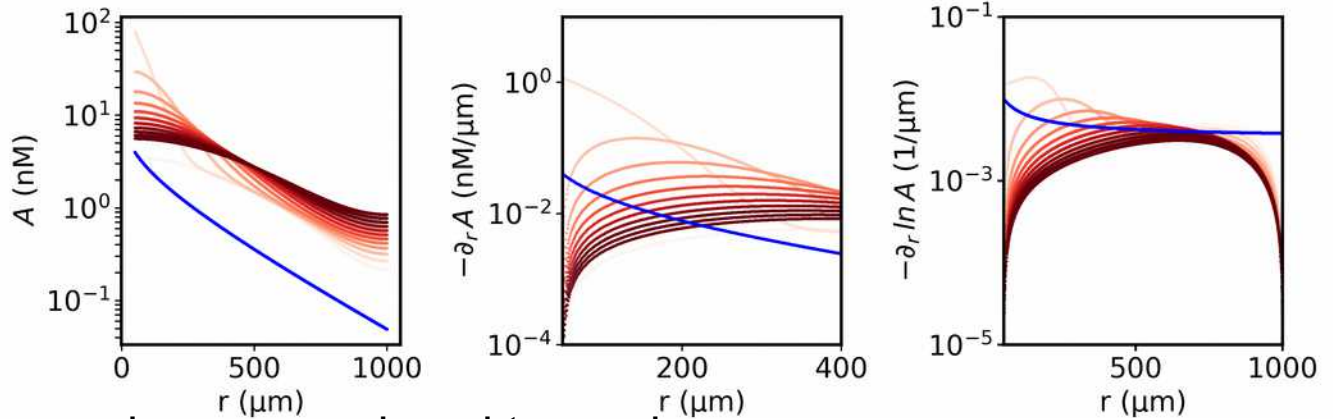# Cellular Automata Monte Carlo Simulations of Cell Response to Chemorepellent

The binary models of radial cell direction were numerically tested for repulsion resulting from a constitutively produced chemorepellent amidst a realistic cAMP source generated by a model studied previously (Martial-Goldbeter, 1987)

Dispersal was reproduced to varying degree for a wide range of parameter values even when $R_{max} \sim$ 1 nM. For a small set of parameters, the linear-linear model and the linear-log model was able to repduce dispersal when driven at a period T=12 minutes but not at period of T=6 minutes, which was observed in WT here. Long persistance times of 6~12 minutes were predicted for inward cell motion in response to a realistic cAMP source.