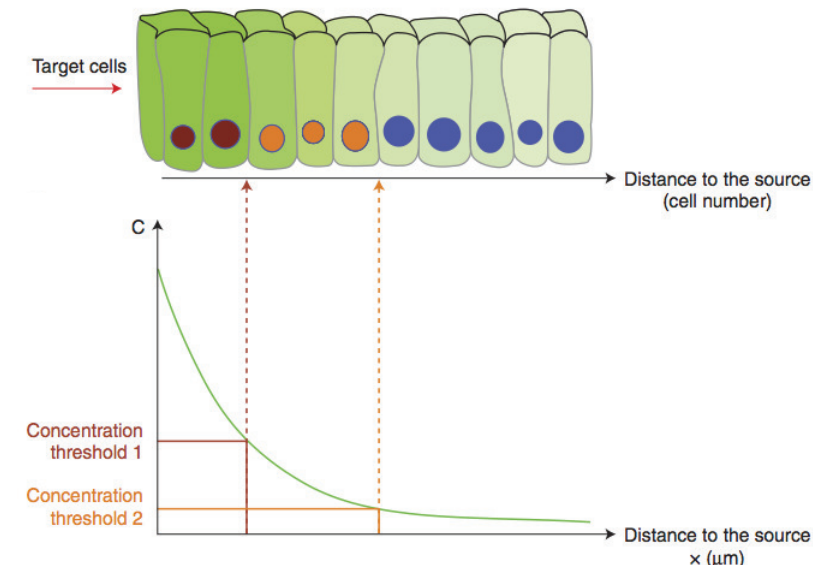
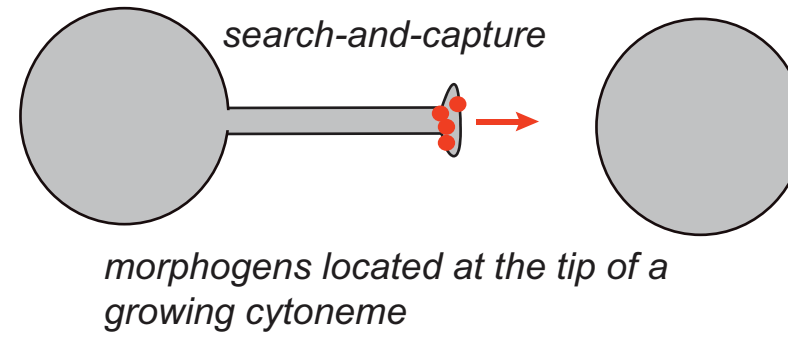


morphogen gradient



Wnt signaling in zebrafish



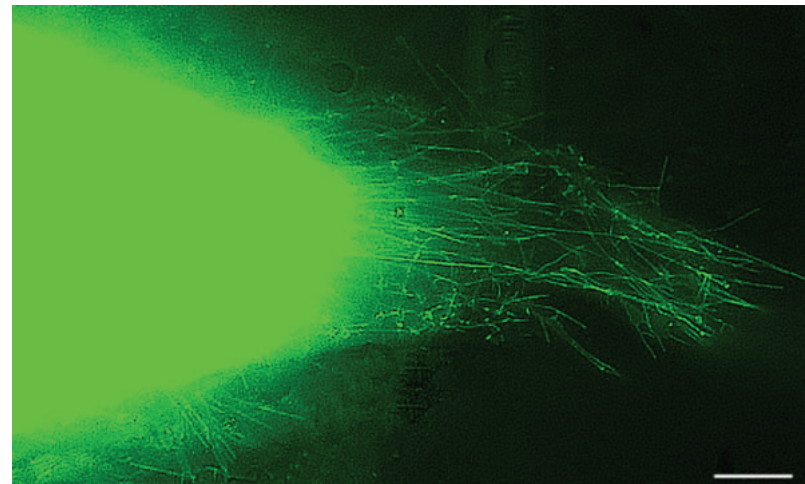
Stochastic processes

random intermittent search processes
resource accumulation and queuing theory
first passage time problems
optimization, robustness
stochastic models of motor transport and
stochastic models of filament growth/shrinkage

Future work

comparison with diffusion-based mechanisms
more realistic multi-dimensional tissue models
regulatory cell signalling mechanisms
other application domains: spread of cancer, Covid-19

cytonemes



Drosophila wing disc and Shh signaling in chicks

